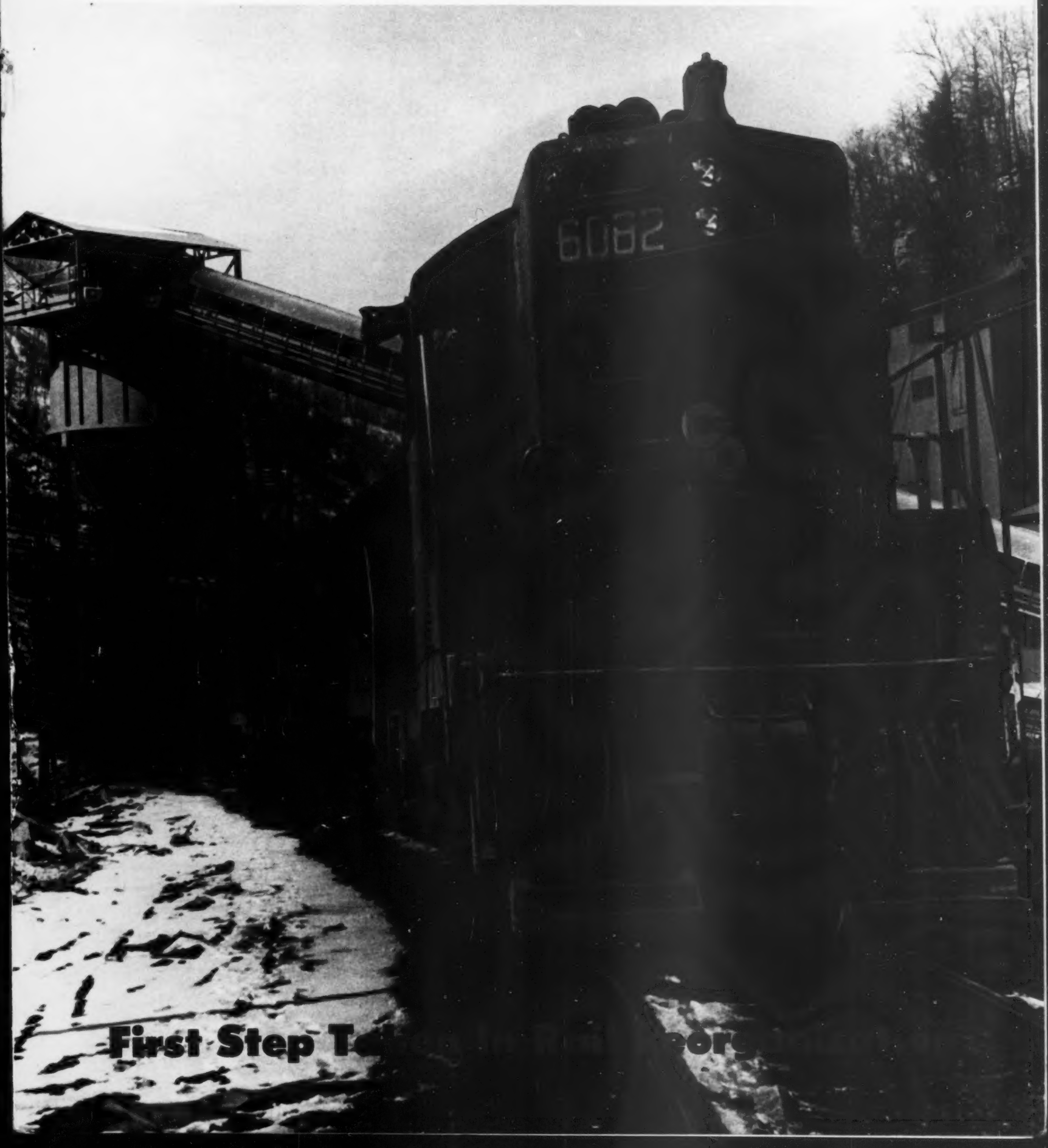
DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA

FEBRUARY 18, 1974

Commerce Today



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FROM THE SECRETARY

A New Economic Assistance Plan

This column was written by Under Secretary of Commerce John K. Tabor.

President Nixon has proposed a new Economic Adjustment Assistance Program in the Department of Commerce to give state and local governments control over local and regional economic development.

The program recognizes the need for action to combat high unemployment and underemployment in communities confronted by changes in their economy. These changes may result from shortages of resources, such as energy, or the loss of a major employer, such as a defense installation. The program also considers the need to stimulate employment and more productive employment opportunities in areas of persistent high unemployment and low income. The President's Economic Adjustment Program is based on direct grants to the states under an allocation formula.

The program is in keeping with the concept of New Federalism and the President's pledge in his State of the Union Message to "continue to build a new era of achievement and responsiveness in state and local government, by cutting the strings of too-tight federal control that have bound the hands of state and local officials in community and economic development programs."

The Economic Adjustment Assistance Program permits funds to be used for grants, loans, subsidies, loan guarantees, tax rebates, salaries, wages—or such other forms of assistance as *the states* may deem appropriate.

Economic Adjustment Assistance funds may be used for public facilities, public services, business development, planning, research, technical assistance—and such other economic adjustment purposes as *the states* may deem appropriate.

Eighty percent of the federal appropriations under the Economic Adjustment Program would be distributed to the states in accordance with an allocation formula. The funds can be appropriated a year in advance of their allocation. This feature would add to the flexibility of the program, making state and local planning and budgeting processes more effective.

The program's flexibility would enable states and local governments to respond quickly and effectively to take early action to reduce or even eliminate unnecessary hardship for the American people. Such responsiveness also would enable states and communities to move in to solve problems that could lead to community deterioration and the creation of economically distressed areas.

The remaining 20 percent of the appropriations under the Economic Adjustment Assistance Program would be considered "discretionary funds." They would be used by the President to meet special and emergency needs arising from regional, state or local problems or from actions by the Federal Government. The latter would include defense-base closings and reductions in the aerospace program.

The President's proposed Economic Adjustment Assistance Program would enable the federal, state and local governments to forge a partnership that will keep initiative at the state and local levels. This partnership would assure more effective use of federal, state, local and private resources to adjust to economic changes. It also would assure our citizens more control over their own destinies.

John K. Tabor

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COVER: *Loading its hopper cars with West Virginia coal at a mine site, this C&O freight train is one which could be affected by the Transportation Department's recently-announced plan to restructure and modernize the rail system of the Northeast and Midwest into a profitable operation. Story begins on Page 4.*

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Published biweekly by the U.S. Department of Commerce, Washington, D.C.
Annual subscription rate $42.40 ($10.60 additional for foreign mailing, $14.30 additional for domestic air mailing). Single copy $1.65. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce Field Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.
Microfiche copy available at 95 cents per issue from National Technical Information Service, Springfield, Virginia, 22151.
Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C., 20230.

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ECONOMIC
HIGHLIGHTS

Business Outlays For Clean Water Council Likely To Exceed Estimate Of $44 Billion

Economic Highlights is prepared by Dr. Sidney L. Jones, Assistant Secretary of Commerce for Economic Affairs.

Cleaning up the nation's waters has become firmly established as a high-priority national goal. It will bring benefits in many forms to millions of people—but it will also be costly.

The cost of providing relatively pollution-free water to drink, swim in, fish in, and for various other individual, public, and industrial uses will be paid for ultimately, regardless of the type of financing, by individuals in their roles as consumers, taxpayers, and stockholders.

An estimated $44 billion (expressed in 1972 dollars), or about two-thirds of the total bill for the water cleanup, will be expended by private industry in the period 1972-1981. Obviously, this will have powerful and pervasive effects on plant and equipment spending by industry, on corporate finance, on employees of these firms, and on the prices of goods produced under more expensive control systems. Furthermore, this estimate by the Council of Environmental Quality may have to be raised by as much as 50 percent because of several factors arising from the Federal Water Pollution Control Amendments of 1972.

The objective of these amendments is to achieve "zero discharge" of effluents into the nation's waters by "point source dischargers" by 1985. A "point source" refers to a facility that discharges effluents directly into a body of water: the amendments do not cover effluents that are discharged some distance away and are carried to the body of water through runoff or land erosion.

Point source dischargers must obtain permits from the Environmental Protection Agency showing allowable amounts of effluents and a schedule for achieving compliance. One group of detailed guidelines proposed by the EPA has undergone intensive review by various agencies, including the Department of Commerce, and industries and is being published for public comment in preliminary form in the Federal Register. This group of guidelines, covering 30 point sources and representing a wide range of industries, will soon become effective. Approximately 75 percent of the nation's major point source dischargers will be affected by these regulations. Another group of regulations, to be published later, will cover another 15-point sources.

Effluent reduction is to be achieved in two phases. The first phase requires that industrial facilities must comply by 1977 with guidelines that set forth the "best practicable control technology currently available" for reducing the flow of pollutants. By 1983, firms must meet stricter standards based on the "best available technology economically achievable." In addition, regulations will cover new industrial point sources.

In each case, the age, size, location of plant, and process employed will be taken into account, as well as the impact of the treatment technology on air, solid waste, noise, radiation, and energy use.

Estimated Incremental Pollution Control Expenditures (In Billions of 1972 Dollars)

	1972-81 (cumulative)	1981 (including annualized capital costs)
Air Pollution	$89.8	$14.7
Public	8.4	1.0
Private	81.4	13.7
Water Pollution	54.1	7.5
Public	19.4	3.0
Federal	1.1	.3
State & Local	18.3	2.7
Private	34.7	4.5
Radiation	1.0	.2
Solid Waste	3.3	.9
Land Reclamation	4.5	.8
Grand Total	152.7	24.1

Source: Annual Report of the Council on Environmental Quality, September 1973, Table 6.

Preliminary recent background data suggest that the 1972 amendments alone could add as much as 50 percent to the 10-year estimate of $44 billion as industry's cost of water pollution control. If the total environmental package, including air and other types of pollution, (but excluding the costs of the 1972 amendments), is considered, the industry share for 1971-1982 rises to $167 billion, or 61 percent of the $274 billion environmental protection bill.

Even this aggregate figure underplays the total bill, because it does not take into account the myriad microeconomic factors that operate through the network of industries to affect the overall operation of the economy. As an example of this interaction, guidelines that affect the production of organic chemicals will have a decided impact on the fertilizer, plastics, and leather-tanning industries—and all other industries that use organic chemicals as a raw material. The synergistic effects of anti-pollution systems undoubtedly will be of a far different magnitude and nature than the sum of effects considered on each industry in isolation.

The estimated $44 billion in real terms that industry must spend on water control is not an entirely new burden for industry. Both the public and private sectors already were spending at a fairly high level for water cleanup in 1971. As the accompanying table shows, incremental costs for industry over 10 years are estimated at $34.7 billion (although this is likely to be higher than currently estimated).

Some changes in the structure of industry undoubtedly will result from the guidelines. The impact of the new rules will vary greatly among industries and among plants within an industry. Generally, the hardest hit in each industrial category are the smaller plants. For example, small plants may experience economic problems if the best practicable control technology for eliminating effluents in that industry can be applied only to large-scale operations.

Aside from all of these unmeasured economic effects, the size of the corporate financing required will affect the economy since corporations will have to obtain the funds from internal sources or from the financial markets. Here again there is some understatement from the corporate manager's point of view because he must consider the amount needed in terms of current and future dollars while the amounts discussed here are in terms of constant dollars—that is, without allowances for inflation.

In addition, corporate officers who foresee little difficulty in raising the necessary funds may not be fully aware that many other companies in many other industries will be seeking new funds for the same purpose and the total impact could significantly alter the total supply-demand relationship in financial markets.

Industrial Categories For Which Preliminary Regulations Have Been Published

Asbestos
Beet Sugar
Cane Sugar
Cement
Dairy Products
Electroplating
Feedlots
Ferroalloys
Fertilizers
Fiberglass
Flat Glass
Fruits & Vegetables
Grain Milling
Inorganic Chemicals
Iron & Steel
Leather Tanning & Finishing
Meat Processing
Nonferrous Metals
Organic Chemicals
Paperboard, Builders Paper & Board Mills
Petroleum Refining
Phosphates
Plastics & Synthetics
Pulp & Paper Mills
Rubber
Seafood Processing
Soap & Detergents
Steam Electric Powerplants
Textile Mills
Timber Products Processing

Industrial Categories For Which Preliminary Regulations Are Now Being Formulated

Auto and Other Laundries
Chemicals, Miscellaneous
Coal Mining
Converted Paper Products
Fish Hatcheries & Farms
Foods & Beverages, Miscellaneous
Machinery & Mechanical Products
Mineral Mining & Processing
Ore Mining
Paint & Ink Formulating & Printing
Paving & Roofing Materials (Tars & Asphalt)
Petroleum & Gas Extraction, Handling, Storage & Residues Disposal
Steam Supply
Transportation Industries
Water Supply

Commerce Today
Vol. IV, No. 10
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Prescription For Northeast's Railroads: Reduce Excess Tracks

Railroads, shippers, and local officials in a 17-state area of the Northeast and Midwest have been presented with a basic plan for reorganizing and reshaping the railroad system of the area into a profitable rail network.

The plan was drafted by the Federal Department of Transportation after nearly a year of intensive work, and has been recommended by Transportation Secretary Claude S. Brinegar as the first step toward the development of a final rail system for the region. The present schedule calls for completion of the final plan, after extensive hearings and review, and its submission to Congress for approval within 20 months.

The initial proposal was made public by Secretary Brinegar at a news conference earlier this month. It is embodied in a three-volume report of nearly 1,000 pages. Brinegar emphasized that the plan represented not the final plan but the Department's recommendations. It is a starting point, he explained, for working out the final plan.

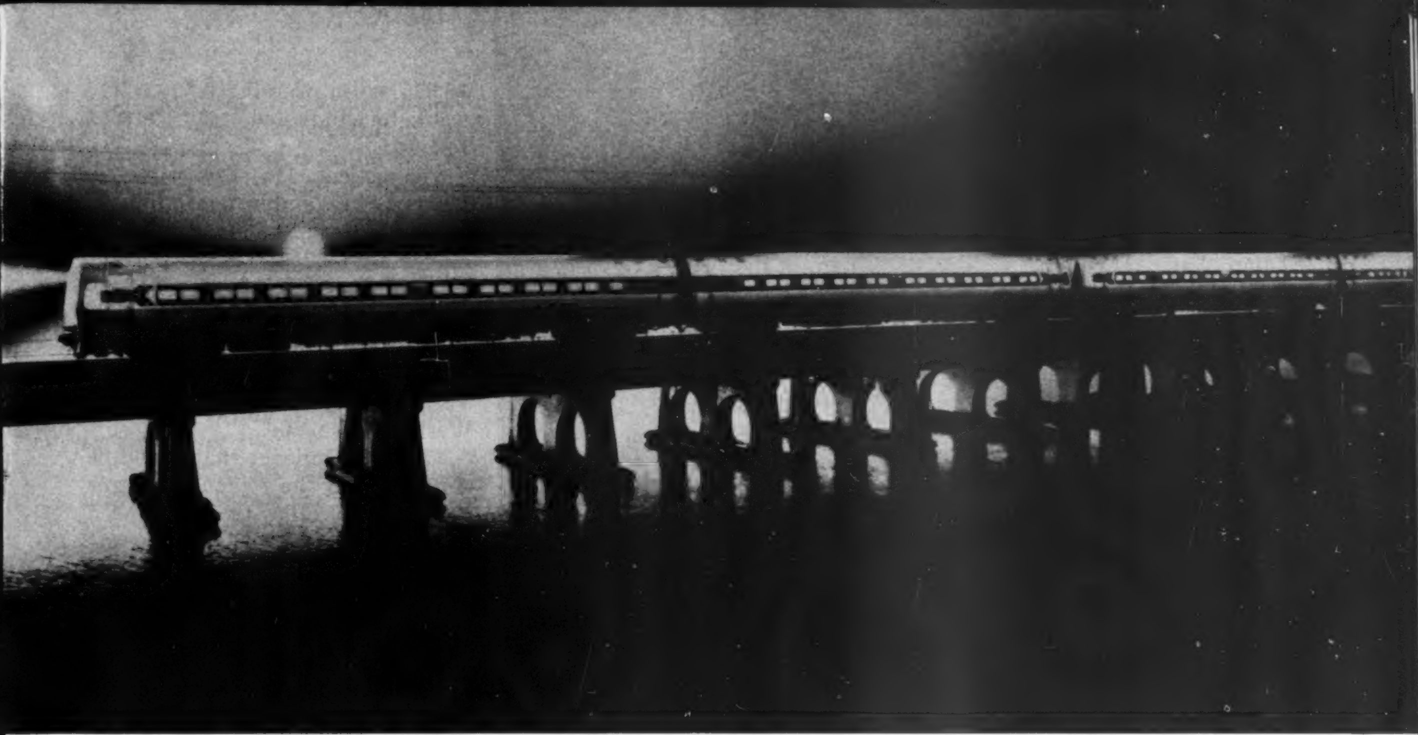
The "first step" plan is provided for by the Regional Rail Reorganization Act of 1973, which became law January 2. The Act also directs the creation of the United States Railway Association (USRA) to plan and finance the restructuring of the rail system. The USRA is a nonprofit government corporation incorporated in the District of Columbia.

IS THIS TRACK NECESSARY?—*Elimination of almost 16,000 miles of Northeast trackage, in addition to the 17,000 already abandoned since peak year 1920, is part of the Department of Transportation proposal to streamline rail service.*

Consolidation unit

The Act also provides for the establishment of the Consolidated Rail Corporation to operate and modernize all or parts of the restructured rail system, and for an interim joint federal-state subsidy program to continue and improve local rail service that otherwise would not be included in the operations of the corporation or other solvent railroads. Future abandonment of unnecessary service is allowed.

Under the Act, development of the final plan is a seven-step process. Other steps to be completed before a restructured rail system is in effect are:



SUNRISE OR SUNSET?—*Reorganization plan initiates effort to bring a new day to Northeast's ailing railroad industry.*

The Rail Service Planning Office of the Interstate Commerce Commission, established under the Act, will hold public hearings on the Secretary's report and prepare a report containing an evaluation of the Secretary's recommendations.

The USRA will prepare a detailed preliminary system plan based on the reports of the Secretary and the ICC planning office.

The ICC office will hold public hearings on the preliminary system plan and prepare a report evaluating it.

The USRA will then prepare a final system plan reflecting the changes recommended by the ICC Office.

The ICC will prepare an evaluation of the final system plan, and lastly Congress will approve or reject this plan.

Brinegar told the news conference that the ICC Office would begin hearings on the "first step" plan in 13 cities March 4.

Under this plan, about 25 percent of the 61,184 miles of track in operation in the 17-state area in 1972 would be eliminated. But the trackage retained in service, Brinegar explained, would serve at least 96 percent of the local originating and terminating rail traffic of the region.

"With the subsidy provisions of the Act," he added, "or in combination with rail-truck service, it is in fact likely that the rail freight cutbacks will be less than four percent. To us, the fact that the necessary line cutbacks are possible with so little overall impact on rail freight shippers is a most encouraging conclusion. . . .

"It also confirms our earlier analysis of the main causes of Penn Central's problems: too many miles of track hauling too few rail cars to be economically viable. . . .

"I encourage local governments and businesses to study our recommendations carefully and to make their comments and suggestions known in public hearings. Through this carefully laid out process we believe it will be possible to design a new private-sector rail system that meets the area needs for high quality rail service, and at reasonable costs to both the users and to the taxpayers."

The 17 states designated in the Act as comprising the region are: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, Ohio, Indiana, Illinois, and Michigan. The District of Columbia also is included. In addition, the contiguous areas of Louisville, Kentucky; St. Louis, Missouri; Davenport, Iowa; and Manitowac and Kewaunee, Wisconsin, are considered in the initial plan as part of the region.

Fights bankruptcy threat

Explaining the purpose of the Act, Brinegar said that it was designed to deal with the national threat posed by the bankruptcy and threatened liquidation of the Penn Central, and the bankruptcy of seven other railroads in the region. These roads are: Class 1 ($5 million or more annual revenue): Ann Arbor, Boston and Maine, Central Railroad of New Jersey, Erie Lackawanna, Lehigh Valley, Penn Central, and Reading; Class II (less than $5 million annual revenue): Lehigh and Hudson River.

In addition to the railroads undergoing reorganization, 37 roads listed as solvent operate within the region, including such well-known roads as the Baltimore and Ohio; Chicago, Milwaukee, St. Paul and Pacific; Chesapeake and Ohio; Canadian Pacific; Illinois Central; Louisville and Nashville; Missouri Pacific; Chicago and North Western Transportation Company; Norfolk and Western; Chicago, Rock Island and Pacific; Seaboard Coast Line; Atchison, Topeka and Santa Fe; and Southern.

"Our report," Brinegar said, "proposes establishing a streamlined, high-volume interstate railroad network. This network would be based on the concepts of consolidated facilities and coordinated rail service. It would also involve consolidated common trackage to be used by competing railroad lines.

"We believe that only through such a plan can we obtain the concentration of traffic and the high productivity needed to enable the railroads in the region—both the ones now in bankruptcy and the existing solvent railroads—to operate profitably.

"Because this high-volume interstate network will require much in the way of coordinated service, we are recommending that all carriers in the region join in and become partners in the planning and restructuring process.

"To create this network, we are proposing that duplicating tracks and under-utilized tracks and facilities be eliminated or downgraded on many interstate routes. The resulting streamlined system would promise high usage and thus warrant a major modernization program.

"Our plan calls for the maintenance of competition between railroads operating between major traffic points on this high-volume network. Our criteria for these major points is that they generate substantial rail traffic in trainload lots which move in the same general direction.

"Those points which do not receive competitive service would retain single railroad service. The plan provides that no single service point shall be far removed from competitive service."

Under the plan, 19 major traffic centers in the region would receive competitive rail service. These are: New York; Newark, N.J., and Boston; now served only by bankrupt carriers; and New Brunswick, N.J.; Philadelphia; Baltimore; Norfolk; Beckley, W.Va., and Bristol, Va. (coal centers); Pittsburgh; Buffalo; Cleveland; Detroit; Toledo; Gary, Indiana; Chicago; St. Louis; Washington; and Cincinnati.

Aside from the 19 major traffic centers, 163 cities in the region would have a single-line service under the plan. Some of these already have only one line.

The standard in the plan under which rail competition would be maintained is that the traffic generating center should provide a sufficient volume of rail traffic to produce at least eight trainloads per day, each moving more than about 200 miles in the same direction.

"In our judgment," the report says, "other points do not require mainline service by more than one railroad."

One conclusion in the report is that major benefits to be realized from the proposed changes would be improved capital productivity and a viable financial base for the Consolidated Rail Corporation and other railroads in the region, with a consequent high quality of rail service.

Another conclusion is that in order to enhance competition and improve efficiency the corporation and other solvent carriers should share facilities and coordinate operations over the high volume network to the fullest extent practicable.

A breakdown by states of the 15,575 miles of rail trackage that would be eliminated under the plan follows:

Connecticut, 175; Delaware, 75; District of Columbia, none; Illinois, 2,650; Indiana, 2,350; Maine, 75; Maryland, 225; Massachusetts, 475; Michigan, 2,275; New Hampshire, 400; New Jersey, 300; New York, 1,875; Ohio, 2,500; Pennsylvania, 1,450; Rhode Island, 25; Vermont, 250; Virginia, 275; and West Virginia, 200.

The track mileage that would be eliminated in the region compares to the 17,000 miles that have been abandoned since 1920, when the peak railroad trackage of 78,000 miles was reached.

The big three

The report points out that labor, capital, and materials are the three principal factors involved in the provision of rail services, and that labor and capital costs each amount to approximately 44 percent of total expenses.

"Thus," the report says, "while the efficiency of rail operations can be improved in many ways, the significant improvements will have to be realized through increases in capital or labor productivity or both.

"In our opinion, one of the greatest opportunities for increasing productivity is in finding ways to change inflexible labor work rules to permit better utilization of both labor and capital.

"The greatest potential for service improvements lies in the elimination of duplicative service in order to permit the more frequent scheduling of efficient train size lots from original terminals, and to permit more direct origin-to-destination service without intermediate stops for reclassification (regrouping) of trains."

Brinegar commented that the improvements recommended in the initial plan should benefit passenger service.

"Some lines that carry both passengers and freight," he said, "will have improved track, signals, and other facilities. We would expect that the heavy concentration of passenger operations in the Northeast region will require that this service be given special consideration in the formulation of the final system plan."

The report says "we believe that passenger service requirements at both the local and intercity levels must be afforded special consideration in the formulation of the final system plan.

"In most cases the routes now utilized for passenger services are heavy freight routes and will likely continue as such. The Department recognizes that Amtrak may wish to make changes in service on segments of present passenger routes as a result of the final plan. Such changes should be limited in their impact to intermediate points on Amtrak's system. The major endpoint cities should not be affected."

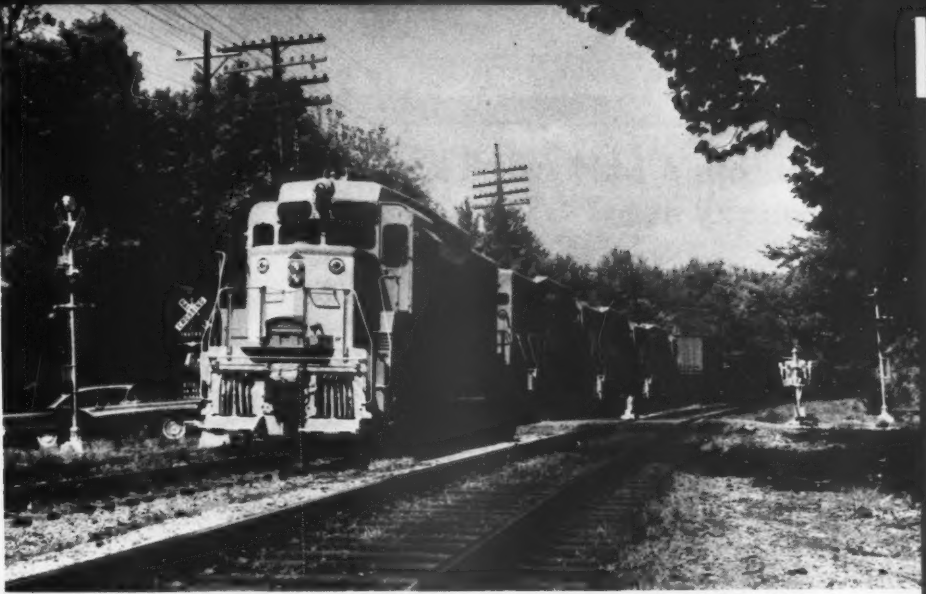
The USRA, the report says, "must devote special attention to the current and projected requirements of commuter and intercity passenger service. The final system plan must insure that there will be no diminution of service quality and that appropriate priority status is given to passenger train movements, particularly in the Northeast Corridor."

Brinegar observed that the Transportation Department's analysis of the impact of the initial plan on energy usage "shows that shifting light-density freight movements from rail to truck will overall save energy."

In commenting on the energy problem, the report explains that the energy efficiency of rail in intercity freight ranges from two to five times that of motor carriers in long-haul service.

"Consequently," the report says, "an improvement in the competitive posture of the rail vis-a-vis the motor carrier mode would work toward greater energy conservation in the nation's transportation system.

"Moreover, consolidation of the large rail traffic flow over a mainline network shared by rail carriers could warrant electrification of many of the mainline routes as an economic and energy-effective improvement.



FOR THE LONG HAUL—*You still can't top the railway for longer distances, heavy volume shipments, new Transportation Department report found.*

"In contrast, the energy efficiency of motor carriers is greater than that of rail for short haul and very low volume movements. In this case, the objective of energy conservation would be promoted by the elimination of light density, short-haul rail movements.

"In many other cases, substitution of track or containerized intermodal (piggyback) movements would also improve the energy efficiency of the overall transportation system."

Environmental plus

The report comments that consolidation of traffic to a reduced rail system and the modernization of the system could curtail existing adverse environmental impacts in three ways: the movement of rail traffic would be made more efficient with consequent reduction in resource use and pollution; the improved intermodal competitive ability of the railroads could attract traffic back to the rails from the highways either as freight car or piggyback traffic; and the rights-of-way released by the restructuring process could be employed for more useful public purposes.

Regarding participation by solvent carriers, the report says:

"Full participation would offer the solvent roads not only the long-term financial advantages of a streamlined and rationalized system but would also preclude the possibility that their own viability would be threatened by a Federally-assisted new rail system.

"Their nonparticipation would prevent full realization of the rail industry's economic potential in the region . . .

"Both the association (USRA) and the solvent railroads should consider the options of the corporation buying lines and facilities from the solvent roads, or selling lines and facilities to them, or joining with them in coordinated operations.

"In the local service area, the solvent roads should consider abandoning service on lines they own which are excess to the system, and combining services with the corporation or other railroads to points which are jointly served. On the mainlines, solvent railroads should consider combining some operations with the corporation, either by buying or selling lines or by joint use of lines where this would improve efficiency."

Record 44 Percent Export Rise Brought 1973 U.S. Trade Surplus

A record-setting increase in exports resulted in a dramatic turnaround in the U.S. trade position in 1973. The merchandise trade balance shifted to a surplus of $1.7 billion, from a deficit of $6.4 billion in 1972, as exports accelerated strongly while imports expanded at a rate only slightly more rapid than in the previous year.

In 1973, U.S. exports, excluding military grant-aid, climbed to $70.8 billion, a 44 percent increase over the preceding year. Imports advanced 24 percent to $69.1 billion. By comparison, exports gained 13 percent and imports 22 percent in 1972.

The improvement in the trade position progressed steadily throughout the year. Following the deficit registered in the first quarter, exports and imports were nearly in balance in the succeeding three-month period. By the third quarter, the trade position had moved to a $1 billion surplus which expanded to $1.6 billion in the final three months.

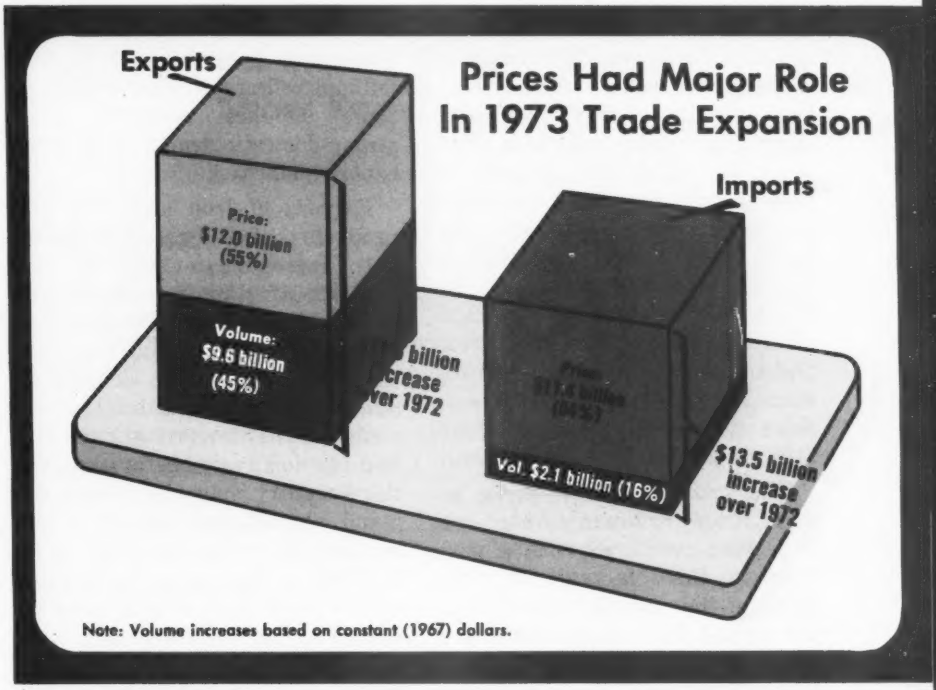
Higher prices, reflecting inflationary pressures here and abroad and, particularly on the import side, the appreciation of foreign currencies against the dollar, greatly amplified the expansion in trade values. Even if export and import totals were adjusted for price changes, however, the improvement in the trade position would still be very substantial. Exports, deflated by the unit value index, advanced by about 23 percent last year, more than double the 1972 increase, while the growth rate of imports was only 5 percent in real terms, compared with 14 percent in the preceding year.

The tremendous export expansion was attributable to several major factors. First, the strong acceleration in foreign economic activity stimulated demand for a wide variety of U.S. products, especially machinery and industrial materials. Secondly, the exchange rate shifts over the past two years have improved the price competitiveness of U.S. products in foreign markets; the strengthening of the dollar in the final months occurred too late to have affected our 1973 export performance adversely. Thirdly, extremely tight supplies of farm products overseas, due to smaller crops in many countries, stimulated a huge expansion in U.S. agricultural exports. Finally, domestic price controls made exporting especially profitable and provided incentive for American firms to step up their sales efforts abroad.

The slowdown in import volume indicates that higher foreign prices, precipitated by the appreciation of foreign currencies, were effective in dampening U.S. demand for goods from abroad. Also, although the real growth rate of the U.S. economy for the year as a whole was nearly as large as in the preceding year, there was a marked deceleration after the first quarter which acted as a restraining influence on our foreign purchases. Finally, tight supplies of some products abroad due to strong indigenous demand held down the import rise still further.

Surge in nonfarm sales

The vigorous pace of economic activity in the countries comprising our major markets boosted sales of U.S. manufactures and other nonagricultural products by one-third to $52.9 billion. Deliveries of nonfarm goods accelerated sharply in the first half of last year and maintained their rapid rate of growth in the final six months.



Prices Had Major Role In 1973 Trade Expansion

Note: Volume increases based on constant (1967) dollars.

Shipments of machinery were in the forefront of the nonagricultural export expansion. At $17.6 billion, these sales exceeded their 1972 level by $4 billion or 30 percent, contributing almost one-third of the total nonfarm export gain. Higher rates of investment spending in many foreign countries and the improved competitiveness of U.S. products as a result of the monetary realignments were the major forces behind the strong upsurge in machinery sales abroad. As in past years, demand was particularly strong for the technically sophisticated and large capacity equipment, in which U.S. manufacturers hold a technological advantage. Heavy outflows of parts for many types of machines, largely to U.S.-affiliates abroad, again contributed importantly to the gain.

Exports of computers and parts climbed by 28 percent to $1.7 billion, a substantial speed-up from relatively sluggish rates of growth recorded in the two preceding years. The faster rise was partly due to an increase in sales of mainframe computers which had declined in both 1971 and 1972. Deliveries of peripheral equipment and computer parts continued to advance as well.

Buoyed especially by increased building activity in Western Europe and expanded development projects in the economically less advanced countries, exports of construction and excavating machinery and tracklaying tractors gained vigorously. Efforts abroad to modernize production processes and cut manufacturing costs were a major factor in the more than one-third increase in shipments of materials handling equipment.

Farm machinery sales gain

The strong advance in exports of farm machinery and tractors recorded during 1972 was repeated last year as growing world food needs stimulated greater agricultural production and sped the shift to more efficient farming methods. A significant portion of the outflow consisted of parts to subsidiaries of U.S. firms, particularly in Canada.

A two-fifths rise was recorded in exports of mining and well drilling machinery. Most of the advance consisted of equipment for oil exploration activity, particularly to Norway, the United Kingdom, Iran, Saudi Arabia, Singapore, and Indonesia. Sales of air conditioning and refrigeration machinery rose substantially, reflecting strong foreign demand for climate control and food storage equipment and the technological edge held by U.S. suppliers.

Exports of automotive products to U.S. subsidiaries in Canada climbed by one-fifth, the same rate of advance as that recorded in the preceding year. Shipments of new cars rose particularly sharply in response to the rapid growth of auto sales in Canada. Greater outflows of parts and accessories were attributable to another substantial increase in Canadian auto production which, in turn, was related to the buoyancy of the U.S. car market since most of the Canadian output is shipped here. For the first time in many years, exports of automotive products to countries other than Canada showed a large increase. The advance reflected in part the greater competitiveness of U.S. vehicles arising from the currency shifts and in part the availability of smaller sized American cars. Shipments to Mexico, Japan, and Australia recorded especially large gains.

Aircraft exports jump

Civilian aircraft exports jumped 36 percent to $2.3 billion. Most of the increase was accounted for by sales of the wide-bodied jet passenger transports of the type introduced to export markets by two U.S. manufacturers in late 1972. After dropping sharply in the previous year, deliveries of military aircraft nearly doubled in 1973. These shipments were particularly heavy in the fourth quarter.

Boosted by large gains in industrial output abroad, tight world supplies of many commodities, and sharp price increases for a number of items, the value of industrial supplies exports recorded a steep advance. Chemical shipments accelerated sharply, climbing by two-fifths to $5.7 billion, as foreign demand intensified and shortages developed overseas. Shipments of organic intermediates posted a large rise, despite supply constraints stemming from shortages of petroleum, the major raw material for these chemicals. Plastic materials and resins gained by nearly one-half, with particularly steep increases to Japan and East and South Asia. Stepped up agricultural production and relatively higher prices prevailing abroad stimulated fertilizer shipments. Sales of nuclear fuels to electrical utilities in Japan climbed steeply.

The volume of softwood log exports, chiefly to Japan, climbed only 6 percent compared with a more than one-third increase in 1972; much of the slowdown occurred in the second half of the year after Japanese buyers agreed to limit their purchases. Sharply higher prices, however, pushed the value of these shipments to nearly double the previous year's level. Lumber exports climbed two-thirds in value, reflecting heavy demand in Japan, Italy, Australia, and West Germany. Much of the 27 percent increase in paper exports, to $919 million, reflected higher prices, as tight supplies resulting from strong domestic demand held down export quantities.

Exports of iron and steel mill products posted a greater than one-half increase, largely on the strength of shipments to Canada and the American Republics. A major factor in the increase was the strength of steel demand in other producing countries which created domestic shortages and limited supplies available for export to third-country markets. Heavy demand abroad and soaring prices boosted the value of steel scrap shipments. Export controls, initiated in July to ease pressures on supplies for domestic use, held down the outflow in the second half of the year, but the continued rise in prices partially offset the dampening efforts of the limitations. Almost half of the increase represented shipments to Japan, but deliveries also rose sharply to Taiwan, Mexico, Spain, and Korea, countries where steel production has grown substantially in recent years.

U.S. agricultural exports recorded an exceptionally large expansion in 1973, climbing by 88 percent or $8.4 billion over the preceding year's total to $17.9 billion. This unprecedented increase was primarily the result of extremely tight world supplies of food and feed grains due to poor crops in many important producing countries. Steep price increases for most commodities played an important role in the export value increase. In volume terms, the rise in farm exports was about 26 percent.

Wheat shipments nearly tripled, reaching a total of $4 billion. Sales to the USSR showed the largest increase for an individual country, but accounted for only 15 percent of the overall rise in value, as sales to our traditional markets—particularly Japan, India, and Korea—expanded sharply and unit prices soared. Large deliveries to the People's Republic of China were also recorded. Heavy world demand for animal feeds and reduced competing feed supplies prompted a huge expansion in exports of corn and soybeans. Shipments of the latter commodity were held down in quantity during the third quarter of 1973 by supply constraints and temporary export controls.

Exports of cotton rose 85 percent in value to $929 million. Expanded consumption, reduced competing supplies, and shortages of man-made fibers were the major factors behind the strong advance. The largest increases were to Japan, the People's Republic of China, Taiwan, and Korea.

Changes In Principal U.S. Exports In Current And Constant Dollars, 1972-73

Billions of dollars

	Change in 1973 from 1972	
	Current dollars	Constant (1967) dollars
Nonagricultural products, total	+13.2	+7.4
Machinery	+4.0	+3.1
Chemicals	+1.6	+0.9
Motor vehicles and parts	+1.1	+0.6
Civilian aircraft	+0.6	+0.3
Iron and steel products	+0.5	+0.3
Steel scrap	+0.4	+0.1
Lumber	+0.2	+ (1)
Paper	+0.2	+0.1
Agricultural products, total	+ 8.4	+2.2
Wheat	+2.7	+1.1
Corn	+1.6	+0.6
Soybeans	+1.2	+0.1
Rice	+0.2	− (1)
Total	+21.6	+9.6

(1) Less than $50 million.

Imports for industry lead

Purchases of industrial supplies increased 31 percent over the preceding year's total, accounting for nearly half of the overall import expansion. Price advances, resulting mainly from shortages of many basic commodities, were an important factor in the value rise.

Most Import Commodities Show Rapid Increases

	1973	
	Value in millions of dollars	% change from 1972
Industrial supplies, total	**26,542**	**+31**
Petroleum and products	7,540	+76
Iron and steel products	3,189	+ 4
Lumber	1,521	+29
Industrial and agricultural chemicals	1,334	+18
Consumer goods, total	**22,696**	**+16**
Automobiles and parts	9,565	+16
Consumer electrical products	2,428	+13
Capital equipment, total	**8,813**	**+32**
Machinery	6,945	+36
Trucks and buses	1,284	+14
Aircraft and parts	584	+34
Foods and beverages, total	**9,081**	**+25**
Meat	1,691	+36
Coffee	1,566	+32
Fish	1,378	+15

Significant volume increases did, nevertheless, occur in response to the expansion in U.S. industrial production. Moreover, capacity ceilings were approached in some key materials producing industries, increasing our reliance on foreign supplies.

As a result of the worsening U.S. energy shortage, precipitated by continued strong demand and little growth in domestic production, petroleum imports soared to $7.5 billion, up 76 percent over 1972. Price increases, especially in the latter half of the year, accounted for more than half of the value increase. The Arab embargo on crude oil shipments to this country imposed in late October had relatively little impact on the volume of imports in 1973 due to the time required for transportation to this country, though receipts decreased somewhat in the final weeks of the year. Natural gas imports fell by 15 percent, the result of Canadian restrictions on outflow.

The rising trend of lumber imports, mainly softwood grades from Canada, continued as arrivals increased 30 percent. However, a slump in housing starts beginning at mid-year caused lumber imports to fall substantially in July-December compared with the first half.

Although the value of iron and steel-mill product arrivals increased marginally, the import volume declined 14 percent due to strong steel demand abroad which limited supplies available for export to this country. With the drop in purchases from abroad and record domestic output, steel imports accounted for a significantly reduced share of U.S. apparent consumption last year—12.4 percent compared with 16.6 percent in 1972.

Substantial price increases, caused by speculation and supply disruptions as well as rapidly increasing demand, raised the value of copper imports, but volume was little changed. Imports of aluminum dropped sharply in both value and volume terms because of substantial sales from government stockpiles. Heavy industrial demand led to large increases in imports of silver bullion, platinum, and palladium.

Imports of newsprint climbed 12 percent to $1.2 billion, reflecting higher prices and greater U.S. reliance on supplies from Canada. Entries were reduced in the second half of the year, however, in part because of strikes at Canadian mills which interfered with production. Large increases were also recorded for imports of woodpulp, chemicals, tires and tubes, and iron ore.

Consumer imports modest

Consumer goods imports, after increasing by one-fourth in 1972, rose at a somewhat more subdued rate of 16 percent to $22.7 billion last year, as demand was dampened by higher prices stemming from the two dollar devaluations and the appreciation of foreign currencies. The quarterly trend of these purchases showed a strong rise in January-March, more moderate increases in the second and third quarters, and a fractional decline in the final three months of the year. Nearly half of the increase resulted from a greater inflow of automobiles and parts. Automotive imports from Canada climbed 12 percent, primarily reflecting continued strong demand for the compact and sub-compact cars which constitute the major portion of Canadian output. After peaking in the first quarter, however, the value of these imports drifted slightly downward. Imports of foreign-type automobiles declined in quantity for the second straight year, but the import value was up $600 million because of higher prices reflecting the monetary realignments and a shift in import composition toward larger, more luxurious models. The buoyant pace of foreign car sales last year, which lifted their share of the U.S. car market to 15.5 percent from 14.8 percent in the preceding year, was sustained through a substantial drawdown of inventories.

Imports of non-automotive consumer goods advanced 16 percent, about half the rate of growth recorded in 1972. Higher foreign demand intensified and shortages developed overseas. Shipments of organic intermediates posted a large rise, despite supply constraints stemming from shortages of petroleum, the major raw material for these chemicals. Plastic materials and resins gained by nearly one-half, with particularly steep increases to Japan and East and South Asia. Stepped up agricultural production and relatively higher prices prevailing abroad stimulated fertilizer shipments. Sales of nuclear fuels to electrical utilities in Japan climbed steeply.

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Imports of non-automotive consumer goods advanced 16 percent, about half the rate of growth recorded in 1972. Higher foreign

Measures Of Import Penetration

Percent

Import ratios	1971	1972	1973
Total to GNP	4.3	4.8	5.4
Consumer goods to personal consumption expenditures	5.3	6.1	6.4
Capital goods to investment in producers' durable equipment	8.3	10.1	12.1
Food to personal outlays on food	4.7	5.0	5.6

prices, following the depreciation of the dollar, were partly responsible for the slowdown. Purchases of consumer electronic products advanced by 13 percent, compared to a rise of more than one-third in 1972. Imports of transistor radios, sound recorders, and television sets all slowed considerably, as a sharp drop in the volume of these arrivals from Japan was only partially offset by higher Japanese prices and increased entries from Taiwan and Korea. Imports of sewing machines and motorcycles, both imported primarily from Japan, declined in both value and volume.

Spurred by investment

Heavy U.S. investment spending and higher foreign prices combined to boost capital goods imports by one-third last year to nearly $9 billion. Machinery arrivals, up 36 percent, were the major contributor to the increase. Agricultural machinery, especially harvesting machines and parts from Canada, advanced strongly in the wake of record U.S. production and rising farm incomes. Entries of semiconductors, tubes, and transistors advanced 76 percent, largely on the strength of shipments from foreign affiliates of U.S. firms in developing countries. Singapore was the largest supplier, followed by Mexico, Korea and Hong Kong. Materials handling equipment imports, especially forklifts from Japan, climbed two-fifths, stimulated in part by the increase in U.S. industrial production and the competitiveness of foreign manufacturers in standard types of equipment. Imports of aircraft engines, electric power machinery, calculators, and machine tools also increased. Conversely, receipts of textile machines were down sharply, due to a decline in purchases of knitting machines from the very high levels recorded in preceding years, and the more favorable competitive position of domestic producers following the currency shifts.

Substantially higher prices accounted for nearly all of the one-fourth increase in the value of food imports, which reached $9.1 billion last year. Strong world demand and reduced supplies of some commodities contributed most to the upward pressure on prices. Imports of coffee rose one-third in value, but only 5 percent in volume. Lower Brazilian production, due to a frost-damaged crop, limited world supplies and boosted prices substantially. Cocoa bean imports also expanded sharply because of higher prices, prompting some manufacturers of chocolate products to switch to synthetic substitutes. The volume of sugar imports dropped marginally as lower availabilities prevented some suppliers from fulfilling their quotas, but the value rose 10 percent.

Meat imports, now the largest food import item, rose 36 per cent, principally reflecting greater arrivals of higher priced fresh beef from Australia and New Zealand and canned hams from Denmark, the Netherlands, and Poland. Higher quotas in order to alleviate tight domestic supplies raised arrivals of dairy products. After falling in 1972, imports of whisky advanced by more than one-tenth.

Wide area trade gains

The favorable shift in the U.S. trade position last year reflected improved balances with most major world areas. Among the developed areas, exports to Western Europe, boosted by greater agricultural and machinery sales, far outstripped the rise in imports, thus restoring our traditional trade surplus with the region. Similarly, shipments to Japan rose much faster than our imports from that country, shrinking the deficit to $1.3 billion from over $4 billion in the preceding year. The trade deficit with Canada showed no significant change as imports, swelled by greater purchases of industrial supplies, recorded an increase roughly equal to the rise in U.S. exports.

The trade balance with the developing countries moved back into surplus in 1973, despite large petroleum purchases, as shipments soared in response to generally favorable economic conditions in these areas. Greater deliveries to the American Republics and East and South Asia made up about three-fourths of the export gain.

Trade with the Communist areas was sharply higher. Exports, consisting mainly of agricultural products, recorded a much larger advance than imports, pushing the surplus here to nearly $2 billion.

This article reviewing U.S. foreign trade in 1973 by major commodities was prepared by the Commerce Department's International Trade Analysis Staff. The last quarterly review appeared Nov. 26.

Readers are reminded that the same staff prepares a quarterly publication highlighting current trends in international economic activity. Entitled* International Economic Indicators*, the report provides key comparative data on the United States and its principal industrial competitors. Copies of the most recent issue, the first for 1974, are available at 30 cents each, from Department of Commerce District Offices; from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from the National Technical Information Service, Springfield, Va., 22151. Order number: OBR 74-02.

Standardized Plants To Speed Move Toward Nuclear Power

Atomic energy is being pushed to the forefront as the future feeder of the nation's energy-hungry economy. Research in progress at Commerce's National Bureau of Standards will play a key role in making the atom a mass producer of electrical power at reasonable rates.

Standardizing the nuclear power plant design will save millions of dollars in construction costs by reducing the margin for error in estimating plant costs and cutting down the time required for construction.

NBS, the authority on standards, is perfecting measurements to aid in standardizing the design, and to resolve the "equity in trade" question in the nuclear cycle—the question of how buyer and seller of nuclear fuel really know what's in the fuel rods, since nobody will want to take a peek.

Time has come

"The time has come when standardized design of nuclear plants can be made available, and this can cut down the time required for construction," says Dr. Dixy Lee Ray, Chairman of the Atomic Energy Commission.

Forty-two nuclear power plants are operable today, 58 are under construction and 101 are on order. By the turn of the century nuclear power is expected to be producing 50 to 60 percent of the nation's electricity needs.

Obviously, this necessitates a substantial increase in the mining and processing of uranium, plutonium and thorium, so at least one industry's outlook is brightened by the current oil shortage.

One pellet of uranium in a fuel rod of a present day nuclear power plant will turn out about the same energy as a ton of coal. Nevertheless, supplies of uranium are limited. This is one reason for development of the second generation of reactors, the "breeders," so-called because they will breed more fuel than they use.

The current generation—all 42 operable plants and those under construction—are light water ther-

TAKE A PEEK—*Highly specialized equipment at National Bureau of Standards monitors work with neutrons in the fission development program.*

DRIFT TUBE—*Construction of a 200-meter neutron drift tube is under way at the National Bureau of Standards. By accurately measuring the neutron flight time over a long path, the energy can be detected.*

mal reactors. They use uranium 235 which splits into smaller nuclei, giving out energy and neutrons. Uranium 235 comprises only .7 percent of known existing uranium.

By the mid-80s and certainly by the turn of the century, the breeders are expected to be taking over from the light water reactors.

"In the nature and kind of reaction that takes place in the core" of the breeder, Dr. Ray explains, the radiation product is produced "not so much as waste material, but as other fuels which can continue to be utilized."

A logical move

Reasons for the rush to atomic power are simple. Fossil fuels are finite. Eventually they will be exhausted. Moreover, the fossils have many other industrial uses in such areas as petrochemicals. Theoretically, the ideal solution is nuclear fusion, but it is an energy solution belonging to the next century.

Fission is here today and development of the breeder reactor could make it an inexhaustible source. The breeders may also use Uranium 238, the 99.3 percent of uranium ore which is unusable in today's reactors.

"We are working with industry to encourage the development of standardized design," Dr. Ray says.

Up to the present time, she notes, every nuclear plant has been custom designed, and a great deal has been learned.

"It was important to do this (custom designing)," she asserts, "we must not cut off the creative part of the technology.

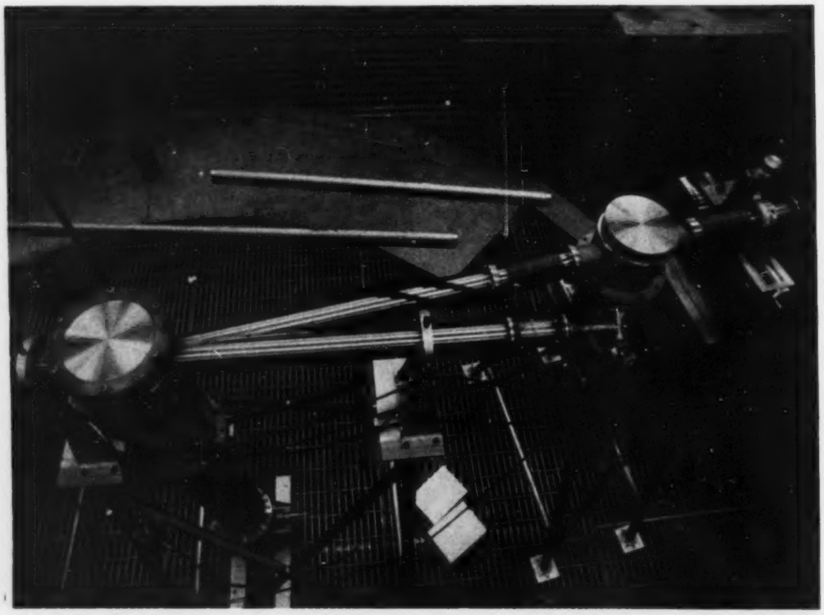
"However, we have reached the point where these are commercially feasible, commercially competitive plants, able to produce power at 8.1 mills per kilowatt hour. Once a utility really gets some experience with the operation of nuclear plants, they are reliable and safe, and in the hands of experienced utilities are operating 73 to 80 percent of the time.

Fuzzy cost estimates

Estimated cost uncertainties in construction of the light water thermal reactor plants run at least $1 million per reactor because of inadequate nuclear data.

Thus, now is the time to turn to standardization, which begins with improving basic nuclear data.

Better basic nuclear data is needed for design and development of the fast breeder reactor. The quest for better data is becoming increasingly important to the Atomic Energy Commission and



MONITOR—*An associated particle neutron flux monitor detects particles emitted simultaneously with the neutron and thereby identifies the existence of the neutron.*

the nuclear industry, because today's computer codes increase the capability of making more accurate use of the data.

"Standard cross sections of atomic nuclei must be measured to a high degree of accuracy," explains Dr. Charles Bowman of NBS. "If you have these standards, it makes the job of measuring nuclear data much easier."

The neutron cross section is the key. Measuring such a cross section involves measuring the neutron's energy, because the size of the nucleus varies enormously, depending on the energy. At low energy it appears large and by changing the energy input only a few percentage points the size of the nucleus could change by a factor of 1,000.

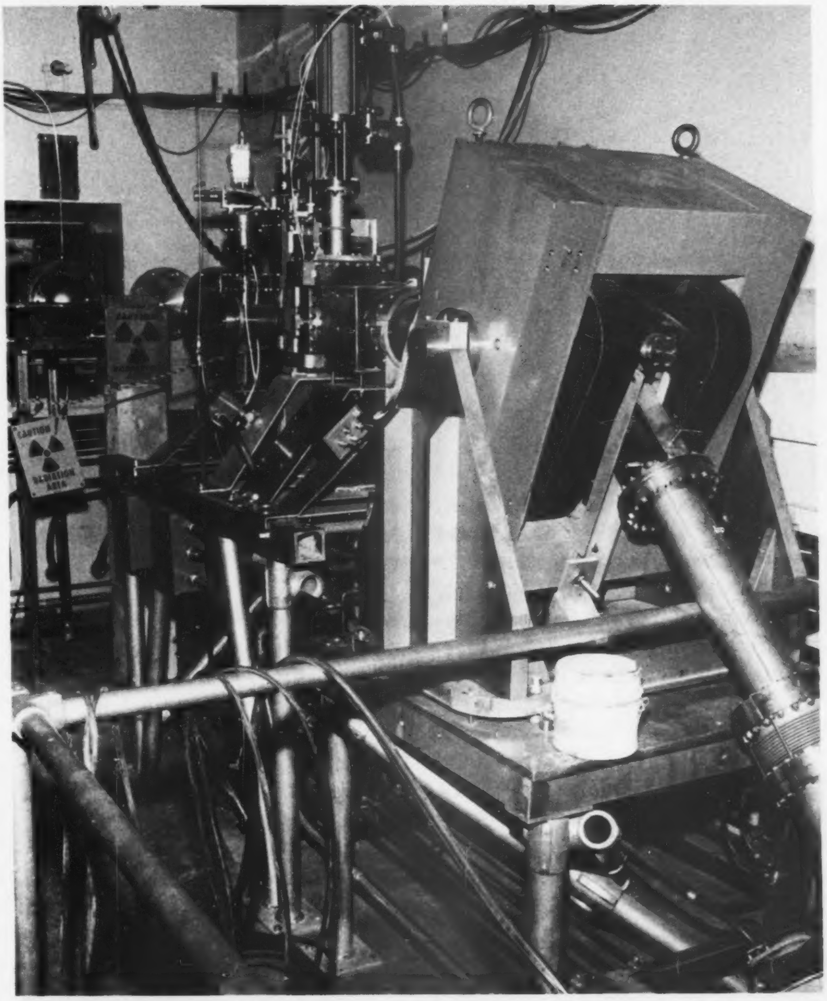
One common technique of solving the problem is to make neutrons in such a way that the reaction producing them has only one energy velocity.

Alternate technique

A second technique is to make neutrons of all energies at the same time, but in such a way as to time them over a certain path—measuring their energy. At the NBS labs, neutrons of all energies are made in short bursts. For example, neutrons that last five billionths of a second are allowed to travel the length of a pipe. Detecting them at the end of the pipe measures the time to one billionths of a second or better. By knowing the distance the neutrons go and measuring the time, researchers can get the velocity and therefore, the energy of the neutron.

A fission cross section of uranium 235 is used as the detector at the end of the pipe, providing additional valuable data on the fission cross section.

Standards being designed to resolve the "equity in trade" question also involve good measurement techniques, according to Dr. Bowman.


TRANSPORTING BEAMS—*This apparatus transports limac electron beams to target for production of intense neutron bursts.*

How does the fuel processor and the utility president really know what each is buying and selling the other? The fuel that is sold to a utility is used and then resold to the fuel processor for reprocessing, salvaging the reusable materials and putting them into new fuel. Equity in trade will become an increasingly significant question when atomic energy is put into massive commercial use.

"One needs to have good techniques that can measure what goes into and comes out of a reactor in order to establish equity in trade," Dr. Bowman concludes. Development of these techniques constitutes NBS's major contribution to atomic power research.

Questions of safety and accidents have clouded fission energy development as a widely-used commercial source. The AEC cites its safety record, while still pumping additional money into safety research on current reactors to resolve any lingering doubts.

Disposal of highly toxic nuclear waste also poses a problem, but Dr. Betsy Ancker-Johnson, Commerce Assistant Secretary for Science and Technology points out that "today's waste might become tomorrow's fuel."

Until then, nuclear waste, which is liquid and has been stored in containers in the past, is being circulated through evaporators and converted into a salt cake which cannot leak out of storage tanks.

NFL Pros Recruit Minority Kids For Business 'Teams'

Fifteen National Football League players recently embarked on their own version of the NFL draft —but they're seeking a different kind of talent. In cooperation with Commerce's Office of Minority Business Enterprise, the ballplayers are scouting up the top minority high school seniors in the country, and trying to sign them up with big business "teams."

"I can't think of of a program that we've been involved in that's more meaningful," said NFL Commissioner Pete Rozelle at a Washington press conference kicking off the 1974 Business Management Fellowship Program. "Apart from being fine football players, these are the kind of men who are best-equipped to make this program work."

High standards

Under the terms of the program, selected high school seniors are given continued employment, in a management situation, with a particular company through all vacation periods of their college years. Only students with financial need, who have been accepted by an accredited college or university, and who rank in the top ten percent of their high school graduating class are eligible. The student must also intend to major in a field of interest to the participating company. Total compensation over the four-year period is expected to average $7,500 per student.

YEARS NFL-OMBE TEAM

STILL A CROWD PLEASER—*Former all-pro Buddy Young (right), who is NFL coordinator for the Business Management Fellowship drive, makes the program look like fun to OMBE's Golden Mayberry (left) and Tim Foley of the Miami Dolphins. Mrs. Mayberry was an originator of the program.*

"In signing this agreement," Under Secretary of Commerce John K. Tabor commented, "we recognize the full value of developing future business persons from the ranks of deserving young Americans. It is a matter of mutual interest to the participating businesses which gain trained personnel, and to the communities in which these potential leaders will serve. We are grateful and pleased that the NFL and Commissioner Rozelle are again joining us in this valuable effort. We're going to put a thousand people on the road to a better life."

Alex Armendaris, Director of the Office of Minority Business Enterprise, pointed out that "in helping a student finance his education through this program, the NFL and OMBE are assisting in the development of a generation of minority business managers, owners and specialists. The program is a highly effective, low-risk method of qualifying worthy students to fill private employment needs."

Both the student and the company get a chance to look each other over in an actual work situation over an extended period, and if both like what they see permanent employment could result. However, there's no binding obligation on either party beyond the four-year commitment

The Business Management Fellowship Program can save the businessman college recruiting costs by affording an unparalleled opportunity to establish rapport with quality young people who have roots in the area they are hired for, and who, four years hence, will emerge as fully-trained people familiar with the corporation's operation.

"Most businessmen are willing to listen, but you still have to sell them on the program's merits," says San Diego Charger defensive end Cal Snowden. "And many of the kids fail to realize the opportunities in business. Traditionally, talented minority kids looked to the fields of medicine, law, education and the ministry. They never really looked to the business community because they didn't grow up in a business environment. Their parents were working for the firms, but didn't have anything to do with how they were run. Our program is designed to develop an awareness in these kids of what business can do for them. And in the process, we're supplying these companies with top flight people," says Snowden, who is helping to coordinate the program out of OMBE's Washington headquarters.

"We're covering the nation much more thoroughly this year. Last year, seven of the eleven players were based in Washington, and still we managed to sign 508 students to agreements with more than 100 corporations. This year all but two of us are out in the field, and the goal is 1,000 more agreements. We're also going to provide some follow-up on last year's students to see how they are doing and to check any possible ways to improve the program," Snowden reports.

Making the rounds

From mid-February until their training camps open in July, the ballplayers will be calling on business firms to acquaint them with the program and get commitments to hire qualified students, while at the same time recruiting eligible high school seniors to fill the slots.

Specifically, they will:

- Contact businessmen in their assigned areas, explain the program to them and get commitments for a specific number of jobs;
- Obtain the names of nominees from principals and counselors at area high schools, and determine which seniors are both interested and eligible;
- Provide schools with promotional materials and follow through on all potential recruits;
- Investigate the possibility of tuition assistance for Business Fellows at area colleges and universities;
- Develop selection criteria which match individual candidates with specific firms, and
- During spring vacation, bring prospective Fellows on board for orientation with pay, introducing them to the people they will be working with when they graduate.

Plans call for Fellows to be reassigned to different areas each year, where they will be exposed to other facets of the company's operation. Pay scales are generally commensurate with those of regular employees performing similar tasks, and generally begin at about $2.50 per hour.

For details on the program, or to hire a student, call Cal Snowden or Mack Alston at 202-967-3975.

Former all-pro Buddy Young, a special assistant to Commissioner Rozelle, will serve as NFL coordinator for the project.

The fifteen players, and their teams, are: Mack Alston, Houston Oilers; Bob Bell, Detroit Lions; Ed Bell, New York Jets; John Bunting, Philadelphia Eagles; Clarence Ellis, Atlanta Falcons; Tim Foley, Miami Dolphins; Jim Harris, Los Angeles Rams; Mel Holmes, Pittsburgh Steelers; Jimmie Jones, Washington Redskins; Dave Lewis, Cincinnati Bengals; Joe Profit, New Orleans Saints; Calvin Snowden, San Diego Chargers; Jon Staggers, Green Bay Packers; Eric Washington, St. Louis Cardinals, and Robert West, Kansas City Chiefs. Each will operate out of his team's hometown except Staggers, who has been assigned to the San Francisco area, and Alston and Snowden, who are stationed with OMBE's Washington headquarters to coordinate the overall program.

FELLOWSHIP PROGRAM
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GETTING THE WORD—*National Football League Commissioner Pete Rozelle (second from left) commends Los Angeles Ram quarterback Jim Harris (second from right) for his participation in the 1974 Business Management Fellowship Program, as Under Secretary of Commerce John K. Tabor (left) and OMBE Director Alex Armendaris (right) look on.*

DOMESTIC BUSINESS REPORT

- **Industry highlights—decontrol of rubber tire, tube industry**
- **'74 World's Fair taking shape in Spokane**
- **Four petroleum products added to export licensing list**
- **Standards for plastic 'jerry can' containers urged**

Tips Point Way To Consumer Satisfaction

Sweeping proposals designed to reduce consumer complaints over the performance and servicing of durable goods have been presented to Secretary of Commerce Frederick B. Dent for transmission to the business community.

A report embracing the proposals was prepared by the Sub-Council on Performance and Service of the National Business Council for Consumer Affairs. It contains 18 specific recommendations and a Code of Responsible Servicing Practices.

Among other things, the report would encourage the following:

—Providing consumers with performance information on consumer durables such as automobiles, large and small appliances, television sets and phonographs.

—The development of a uniform state law for licensing and regulating service firms.

—The creation of personnel training and certification programs.

—The use of independent mediation and arbitration mechanisms for disposition of consumer disputes.

The Code of Responsible Servicing Practices consists of:

Consumers should be offered an estimate of cost in advance of services to be rendered; they should be notified promptly if service appointments cannot be kept; only repairs authorized in writing by the customer should be performed except where other arrangements have been made to the customer's satisfaction.

A written, itemized invoice for all parts, labor, and other charges should be given to the customer upon completion of the work; all repair services should be guaranteed for a reasonable length of time; appropriate records of services performed and materials used should be maintained by the service company for at least one year.

Service technicians should not be paid on a basis that is contingent upon the size of the customer's repair bill; the service dealer should maintain insurance coverage to protect the customer's property while in his custody.

Service dealers should cooperate with consumer protection agencies at all levels of government to insure satisfactory resolution of customer complaints; customers should be treated courteously at all times, and all complaints should be given full and fair consideration.

The report, entitled "Product Performance and Servicing: An Examination of Consumer Problems and Business Responses," was presented to Secretary Dent by Richard L. Terrell, Executive Vice President of General Motors Corporation and Chairman of the Sub-Council, and Charles M. Odorizzi, Executive Vice President of RCA Corporation and Vice Chairman of the Sub-Council.

The Secretary gave the report his "total endorsement," which he said "exemplifies the rigorous standards set by the Council in the consumer areas previously studied and reported upon." The report will be distributed by Dent to

TIRE TESTING—*Special testing of tires for safety and performance before they are marketed should have the effect of reducing consumer complaints.*

businesses and business groups throughout the nation with his personal plea for implementation of its recommendations.

Dent said the report marked the completion of the Council's original research objectives adopted in August, 1971, when it was created by President Nixon. Over the last two years, seven consumer issue areas were examined by the 115-member group, with the result that 12 reports were prepared recommending specific action helping consumers.

Specific recommendations made by the report are divided into three parts: activities before sale, during sale, and after sale.

- Activities before sale:

"Manufacturers should maintain and enforce up-to-date, written policies and procedures on product quality and reliability.

"Manufacturers should establish a reliability engineering responsibility as a priority activity in design and manufacturing.

"Manufacturers should promote the development and use of corporate product standards.

"Manufacturers should establish advisory bodies of corporate and service personnel to continually review and monitor assurance systems."

- Activities during sale:

"Wherever appropriate, manufacturers should promote the development of mechanisms for providing consumers with performance information on consumer durables.

"Manufacturers should give priority to the development of owner manuals that are informative and easy to understand on installation, operation, safety precautions, maintenance, service, and complaint resolution procedures.

"Retailers should encourage their sales personnel to stress the importance to the buyer of proper product use and care, as outlined in his owner manual."

- Activities after sale:

"Manufacturers, trade associations, and educators should improve service personnel job status.

"Service personnel job prerequisites should be based on training and experience which reflect the actual skills and aptitudes required.

"Manufacturers and trade associations should expand efforts to assist vocational education programs to assure that training is related to future job openings.

"Manufacturers and trade associations should place high priority on the expansion of quality service personnel training programs.

"Manufacturers and trade associations should establish service personnel certification programs.

"Businesses serving the consumer should join, support, and assist better business bureaus.

"Manufacturers, trade associations, and officials at all levels of government should cooperate in the development of a uniform state law for licensing and regulating service firms.

—Production and delivery of replacement parts should be given major emphasis in the manufacturing and distribution processes.

—Businesses should support independent, third-party complaint settlement procedures such as mediation and arbitration for resolving consumer disputes, especially if other voluntary mechanisms have been tried without success.

—Trade associations should seek to coordinate information on service problems for their industries,

BEFORE SALE ACTIVITIES—*A panel recommended standardization and testing of products to reduce consumer complaints about performance and servicing. This quality control testing of paper products before marketing is designed to improve performance and quality as well as consumer relations.*

including the establishment of independent complaint resolution mechanisms.

—Manufacturers should establish direct relationships with consumer protection agencies to assist in resolving consumer problems with product performance and servicing."

With regard to activities before sale of a product, the report points out that reliability engineering operations such as design for serviceability, analysis of service problems, and standardization of parts all reflect consumer needs and expectations.

Concerning activities during sale, the report explains that two types of information could help reduce the potential for consumer complaints: product information which could contribute to a better match between consumer needs and ability to pay and product capabilities; and use, care, and service information, which could show the customer how to operate and maintain his product.

As to after sale activities, the report comments that, while product failures inevitably will occur, systems will have to exist "to assure the consumer prompt, honest, and competent product repair."

On the matter of service personnel, the report says:

"Service technicians are often viewed as lower level employees engaged in dirty, unrewarding work. This attitude must be changed if the technician shortage is to be reduced.

"Unnecessarily and artificial requirements for serving positions also reduce the availability supply."

Larger Role Proposed For U.S. Minority Maritime Contractors

A major program has been launched by Commerce's Maritime Administration to encourage the American shipbuilding and ship operating industries to increase their use of minority firms as subcontractors.

Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs, announced that the Maritime Administration, in cooperation with the Office of Minority Business Enterprise (OMBE), has prepared a Directory of Minority Contractors with Maritime Capability for use by the maritime industry.

Blackwell said that at present the directory mainly lists firms located in the East Coast states. However, he added, it will be expanded to a national listing.

"This directory," Blackwell explained, "will give purchasing agents of shipyards and ship operators ready access to minority firms capable of providing goods and services to the maritime industry."

The effort to encourage the use of minority firms as subcontractors is a direct result of the shipbuilding boom generated by the Merchant Marine Act of 1970.

In the three years since the Act was passed, contracts valued at approximately $2.4 billion have been awarded to American shipyards. The current shipyard order book for large oceangoing vessels under construction or on order stands at 88 vessels valued at more than $3.4 billion, the largest peacetime backlog of orders ever attained by the domestic shipbuilding industry.

Man-years of work

These contracts, the Maritime Administration explained, represent more than 170,000 man-years of work in shipyards and those industries which produce the materials and components used in shipbuilding.

In transmitting to Congress his maritime program, which subsequently became the 1970 Merchant Marine Act, President Nixon said that all Americans would have equal access to new jobs created by the expansion in the shipbuilding and ship operating industries.

The Maritime Administration is responsible under an executive order for assuring equal employment opportunity in the shipbuilding, ship repair, and ship operating industries.

Blackwell pointed out that the marked growth in shipbuilding has been accompanied by a rise in minority employment.

"Because of the advances made in the direct employment of minorities in the industry," Blackwell said, "the Maritime Administration is now turning its attention to increasing the utilization of minority business firms in the maritime industry.

"Over and above developing the directory and assisting the maritime industry to employ minority vendors, the Maritime Administration is also encouraging industry participation in related minority business programs.

For example, the Maritime Administration recently broadened its regulations on Capital Construction Funds and Capital Reserve Funds to stimulate an increase in deposits in minority-owned banks.

The statutory minimum on assets a bank had to maintain before it could qualify as a depository for either of these funds has been removed. The only remaining requirement is that the banks must be members of the Federal Deposit Insurance Corporation (FDIC).

These changes have resulted in deposits of more than $1.5 million in minority banks, thus providing funds which are used to finance minority business ventures.

The Maritime Administration also is negotiating with companies in the maritime industry to aid in creating Minority Enterprise Small Business Investment Companies (MESBICS), privately-owned companies licensed by the Small Business Administration to offer financing and management assistance to minority businessmen.

Industry Highlights

Tire Industry Decontrolled, Steel Problems Are Noted

(Industry Highlights is prepared by the Office of Business Research and Analysis, Bureau of Domestic Commerce.)

The rubber tire and tube and steel industries are likely to feel significant impact from recent Cost of Living Council (COLC) actions.

The Council has exempted from Phase IV regulations manufacturers' sales of tires and tubes and wages of employees in these establishments. The five largest firms, which represent 75 percent of shipments, agreed not to raise wholesale prices more than 5 percent and to accelerate the conversion of capacity to the production of small radial tires, currently in short supply.

The voluntary price limitations are considerably more restrictive than price increases which could have been cost justified under Phase IV regulations.

Raw material costs of natural rubber, carbon black, and petroleum-based synthetic materials have been rising substantially. At least 75 percent of the materials for the average passenger car tire are derived from petrochemicals. Shortages of oil and petrochemical feedstocks for these synthetic materials are a serious problem in terms of cost.

The trend toward smaller cars, requiring smaller size tires, is accelerating. There is also an increasing demand for radial tires which have demonstrated savings of up to 10 percent in gasoline consumption on comparable vehicles. Therefore, significant additional capacity for radial tires, especially smaller sizes, is urgently needed.

The five major tire producers plan to invest $600 million for new tire facilities in 1974. Sources of funds for capital investment are a major problem of the industry because of high interest rates and low return on investment.

Major COLC actions, announced late last month, affecting the steel industry, are: (1) to permit new price increases that will generate an estimated $65 million in additional revenue; (2) to exempt from price controls the prices of steel products such as plates, sheets, strips, rod bars and tubing listed in Standard Industrial Classification number 331 by steel manufacturers whose annual sales derived from the sale of those products in total are less than $50 million; (3) to remove the maximum price limitations which had restricted price increases on individual items within steel product lines, and (4) to suspend until further notice decisions on additional current and future price prenotifications.

The steel industry had prenotified for price increases totaling $1,178 million or an increase of 7.07 percent over the weighted average of prices in effect during the third quarter of 1973.

Of this, the COLC denied $422 million or 2.53 percent because the increases were not cost justified, and ruled that $691 million or 4.15 percent had already been permitted through the ferrous scrap cost pass through and the price adjustments allowed to go into effect on sheet and strip on Jan. 1. The remaining $65 million or .39 percent was the net allowable increase.

The COLC stated that it allowed increases to the extent that the steel companies could cost justify. The result was that several producers, including U.S. Steel and Bethlehem, the two largest companies in the industry, were permitted no additional increases over what was previously allowed, while others were granted increases.

The COLC announcement indicated that the pricing flexibility provided by the new rules would give the steel industry incentive for producing oil country goods and other short supply products such as rebars, mine roof bolts, and baling wire.

Gasoline Pump Price Dials Problem Resolved

Hundreds of thousands of gasoline pumps have been rescued from the threat of premature retirement by a simple suggestion from Commerce's National Bureau of Standards.

Many pumps made before 1960 have price dials which can be set only as high as 49.9 cents per gallon. With the price of gasoline exceeding that level in many areas. older pumps were confronted with a "computer breakdown."

NBS's Office of Weights and Measures suggested that service station operators with older pumps simply figure the price of gasoline in even numbers of cents and tenths of cents and then set the dials on the pumps to half the price per gallon. Instead of 52.8 cents a gallon for example, the pumps would then read only 26.4 cents.

Pumps should be labelled prominently "Price per half gallon" and "one half total price," NBS recommended, adding that the signs should be posted at each pump explaining the necessity for the unusual computations.

When the effect of the price rises became apparent, oil companies, gasoline dealers and state weights and measures officials turned to NBS for help.

They reported that conversion of the older pumps to register the higher prices could take about three years to complete.

Expo '74 World's Fair Taking Shape In Spokane

The world's major economic powers will join the United States, some 200 of its leading industries and several of its states in what is expected to be a spectacular and broad-ranging international environmental exposition in Spokane, Wash.

Expo '74 World's Fair, which opens May 4 and continues to Nov. 3, runs the gamut from serious, thought-provoking exhibits on environmental problems and solutions to folk music to international scientific symposia featuring top-level scientific experts.

Centered in the breath-taking scenery of the Pacific Northwest, it's the first U.S. World's Fair approved by the 36-nation Bureau of International Expositions since this country became a member of the organization and the only major international exposition in the United States during the bicentennial celebration.

Taking the theme, "Celebrating Tomorrow's Fresh New Environment," Expo '74 sits on two islands in the middle of a river in the center of Spokane—a 100-acre site which once housed a railroad staging yard and rundown warehouses. The site itself represents the beginning of a new era in all people's relationship with their environment.

The U.S. pavilion's unique canopy roof is expected to be hoisted into place by March 1 and construction on the entire exposition is said to be running weeks ahead of schedule.

Although the current gasoline shortage has caused some concern, Expo '74 officials are optimistic. An Expo task force is working on alternative modes of transportation.

Asserting that the World's Fair is "here to help show what this energy crisis, what the environmental concerns are all about," Expo officials are urging visitors to consider a number of suitable alternatives to the family car. These include tour packages, charters, pooled resources and public transportation.

The Canadians, who have no gasoline problem, also offer a friendly solution. Canada is only 90 miles from Spokane and U.S. citizens enroute to or from Expo '74 could drive north and across country through Canada where gasoline is available. The roundtrip from Spokane to the Canadian border is less than 200 miles and most cars can make that on a tank of gasoline.

Canada, the Soviet Union, Japan, the Republic of China (Taiwan), the Republic of Korea, Australia, Iran, Philippines, and West Germany will have pavilions in which each country will present the lifestyle of its people and their involvement in the environment.

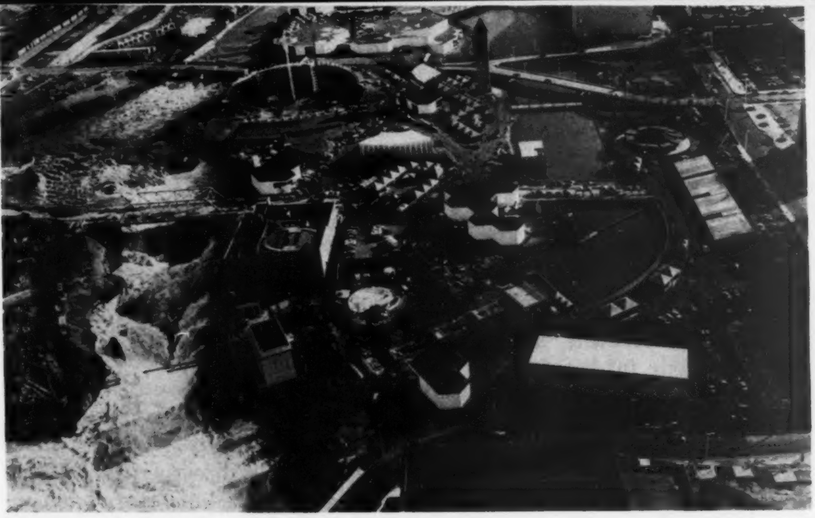
The Russians, who will have the largest foreign pavilion (52,000 square feet), are expected to present the Leningrad Kirov Ballet, the Moiseyev dancers and the Georgian Singers and Dancers. The Republic of China (Taiwan) will present national music, dance and folkloric troupes.

States with pavilions will be Idaho, Montana and Washington. A number of other states are expected to participate in the exposition.

Industrial participants, many of whom have planned elaborate exhibits, will use this opportunity to demonstrate to the world their concern with environmental issues and contributions to the future well being of society. Industrial exhibits in the Joy of Living pavilion, energy pavilion and forest products pavilion are said to be especially creative.

The goal of the United States

SPOKANE—*A workman cinches down a light that will illuminate the top of the Great Northern tower on the site of the Expo '74 World's Fair. In the background is the Washington State pavilion, one of four permanent structures.*



PANORAMIC VIEW OF CONSTRUCTION—*The Spokane River rushes past construction work on Expo '74. The World's Fair is going up in the middle of downtown Spokane. The U.S. pavilion is the semi-circular structure on the upper right bank of the river. Its steel girding is almost ready to hold the canopy top.*

HISTORIC CLOCK—*A carillon is being installed in Spokane's old clock to chime the hours throughout Expo '74 World's Fair which opens May 4.*

pavilion, which occupies a choice four-acre site, is to motivate action by conveying an understanding of each person's impact on the environment and what he or she can do to help resolve the often conflicting environmental issues.

The U.S. pavilion's design is an expression of environmental concern. Fully harmonizing with the surrounding terrain, the structure appears to grow naturally out of the earth. Its open roof lets in fresh air and sunshine, bringing the outdoors inside.

Unusually wide, sweeping arches minimize the transition from the exterior to the interior, where landscaping further enhances the indoor-outdoor atmosphere.

Beneath the canopy the thematic presentation is tailored to address environmental problems from three standpoints. In one area visitors are made conscious that they have a vital stake in each of the environmental issues by a film which conveys the enormity of the problems at the global, national and local levels.

They move to the Environmental Consumer Area which deals with the same issues at an individual level. With a better understanding of their relationships to the environment, visitors are then encouraged to become personally involved in solutions through exhibitry in the Environmental Action Center. There, they can see a progress report on programs undertaken by local, state and national governments and learn how they, as active, concerned citizens, can help.

A Motiva presentation is the last of the formal displays. The 18 screen slide show is an echo of the entire pavilion, bringing together scenes from the film, the displays in the central courtyard and the environmental action center exhibitry. In a poetic, impressionistic manner, it recalls everything that has been said and serves as a summary reminder that people must work together to save the environment.

Visitors may purchase environmental publications at the pavilion's Government Printing Office bookstore, or may select video tape films for individual viewing on closed circuit television.

Another aspect of Expo '74 will be the scientific symposia. Three general meetings are planned to discuss world environmental problems. In eight additional meetings, experts from various countries represented at the fair will discuss environmental problems in their countries.

The aim of the symposia is to get policymakers, experts and the general public together to discuss ways to make the earth a better place. Financing for the symposia is coming from private business, foundations, the National Science Foundation, and other organizations.

Acknowledging that fair-goers love fun as well as exposure to new knowledge, Expo '74 officials have scheduled top international entertainers, ranging from comedians to classical performers; even a professional basketball tournament.

General appeal performers who have scheduled appearances at Expo '74 are Lawrence Welk, Jack Benny, Victor Borge, Liberace, Gordon Lightfoot, the Carpenters, the Irish Rovers, pianist Walt Wagner, and the King Family.

The Mormon Tabernacle Choir is scheduled to appear July 18-19, the International Water Follies, July 22-Aug. 4, and the Master Festival of Music, June 20-21, and Roger Williams, May 10-11.

The Royal Shakespeare Theatre featuring Sir Michael Redgrave will present three plays.

For classical music lovers there will be violinist Issac Stern, Van Cliburn, and the Joffrey Ballet. A number of symphonies and operas are scheduled.

The Seattle Super Sonics basketball team will play a two-day tournament against others teams.

U.S. Research Data Can Save Business Dollars, Time

Traders lists that were never before available from the Securities and Exchange Commission, a hitherto unpublished dictionary file of Food and Drug Administration standards, an input-output system that tells which industries are doing business with other industries and in what state. . . .

These gems of information are from a new book which, for the first time, gives the businessman a glance at what's available from the Federal Government in machine-readable data files, bases and related software.

"Directory of Computerized Data Files and Related Software," published this month by the National Technical Information Service, is a guide to virtually all major Federal Government research efforts. It contains reports on data available from more than 60 federal agencies and includes 524 entries.

"It can save the businessman time and money by avoiding duplication of research efforts," says Robert Jaxel, NTIS program manager for computer products. Jaxel and Joseph Vasquez, project leader at the General Services Administration's National Archives Record Service, assembled the book.

"Most of the active research in government is put on computer," Jaxel explains. "This catalog tells the businessman by agency what files are produced."

NTIS is prepared to further cut red tape. Upon request, NTIS will furnish the book's users, the name of the person in the agency to contact and even make the initial contact.

Concentrating on the major data-producing agencies in the first year, NTIS plans to update the book on an annual basis and expand its scope.

The book preserves confidentiality.

"Everything in the directory is what the generating agency has deemed public information," Jaxel emphasizes. "There are no disclosures of individuals or individual companies which would give confidential information or data of a financial nature.

In the new publication entries are indexed by subject field and cross referenced by generating agency. Geographic references are made when appropriate. File descriptors, identifiers and geocoding guide the book's user.

Each entry contains a unique catalog reference number, the generating agency, file title, date of coverage, file, size, number of reels of tape, the contributing agency report number, a technical description of the tape file including drive, manufacturer and model, tracks, density, parity, codes or languages. It also contains the available source price.

A file abstract describes the purpose, scope and file coverage, source documents used as inputs to the file, publications produced from the file and listing of software available with the file.

Commerce Today ***readers have 10 days to take advantage of the special prepublication discount which offers a 25 percent saving on this book. Directory of Computerized Data Files and Related Software (NTIS-SR-74-01) can be purchased for $45 ($47.50 foreign) from National Technical Information Service, U.S. Department of Commerce, P.O. Box 1553, Springfield, Va. 22151. After Feb. 28 the price will be $60. Checks payable to NTIS, or charges to American Express or NTIS deposit account number are acceptable.***

"Each entry is verified for completeness and accuracy by an agency representative and further screened for accuracy by the archives staff," Jaxel points out.

Besides being a reference for federal data, the directory also functions as a mail-order catalog. Many of the computer tapes listed are available directly from NTIS.

Uses of the directory appear endless.

For example, market research firms and large distributors will use the input-output matrix to spot consumer markets and trends in various states.

Transportation models available from the Department of Transportation would be of interest to the trucking industry and others considering shifts and designs in transportation.

Environmental Protection Agency files and models on wastewater treatment could be of interest to heavy manufacturing plants.

And, pharmaceutical manufacturers and dealers will find quite a bit of information never before available on FDA definitions and standards.

The 1974 publication draws heavily from the Departments of Commerce, Agriculture, Labor, Health Education and Welfare, Transportation, Interior and parts of Defense.

It also has entries from the Office of Economic Opportunity, Office of Management and Budget, the Smithsonian, National Science Foundation, Office of Emergency Preparedness, Environmental Protection Agency, Federal Communications Commission, parts of the General Services Administration, Interstate Commerce Commission, Federal Reserve Board, Civil Aeronautics Board, National Aeronautics and Space Administration and the Securities and Exchange Commission.

Association Unit Offers Guide To Aid Corporate Energy Audit

"A Guide To Energy Management," an audit procedure which businesses and industries are using to spot places to save energy, has been published by the American Society of Association Executives.

The guide gives a blueprint for businessmen and trade association executives to use in analyzing energy consumption, assessing the impact of energy shortages, and formulating plans to deal with the energy crisis. Copies were released at a White House Conference on Energy which was attended by top government officials and by association leaders from throughout the country.

ASAE Executive Vice President James P. Low explained that the guide is intended for the use of trade and professional associations seeking to help their members cope with and plan for energy-related problems.

"It is the hope of ASAE that concerted voluntary efforts such as this will help businessmen to reach reasonable and workable solutions to our country's energy problems," Low stated.

In addition to a step-by-step procedure for auditing the energy resources and usage of a company, the guide presents trade associations with a procedure to follow to obtain an energy profile of their industries.

The guide was prepared with the special assistance of the national accounting firm of Ernst and Ernst and the Commerce Department.

Secretary Dent has urged every business manager to consider carefully the procedures described in the book. The guide "will enable many companies to see their way through this trying period and help them to hold down production costs and safeguard jobs," Secretary Dent said.

The ASAE, which includes 5,000 executives of trade associations and professional societies, was presented a SavEnergy Citation by Secretary Dent for development and publication of the audit procedure.

Export Of Four More Petroleum Items Curbed

Exports of four additional petroleum product categories were placed under quantitative licensing restrictions by the Commerce Department for the first quarter, 1974.

Included are kerosene, jet fuel and carbon black feedstock oils as well as butane, propane and natural gas liquid, the latter three to be combined under a single quota.

"The restrictions on jet fuel, carbon black feedstock oils, and butane, propane and natural gas liquids are necessary because export licensing of these commodities has been exceeding the historic rate of export and threatens to reduce domestic supplies to unsatisfactory levels" Secretary Dent said. "Quantitative restrictions on kerosene are necessary because it is readily substitutable for jet fuel.

"The restrictions will enable us to assure our domestic needs and at the same time maintain our historical export levels in these commodities."

The new action brings under quantitative licensing restrictions for the current first quarter all the petroleum products which were required to be licensed by the action taken Dec. 13, 1973. It was taken under the authority of the Export Administration Act of 1969, as amended, and is designed to carry out the objectives of the Emergency Petroleum Allocations Act of 1973.

Since Jan. 23, country quota restrictions have been in effect on gasoline and blending agents, aviation gasoline, distillate fuel oil and residual fuel oils. At that time the products covered in the Feb. 7 action were granted 100 percent licensing against contracts calling for shipment during the first quarter, but warned that they might be placed under quota at any time if licensing for export were to significantly increase.

All export licenses issued to an exporter on or after Jan. 1, under the 100 percent licensing system, will be charged against the exporter's quota shares.

Exporters will receive letters of entitlement specifying the quantities of each commodity for which they may apply for export licenses during the first quarter, based on their histories of exports during 1971, 1972 and the first half of 1973.

Crude oils, which include crude petroleum and petroleum partly refined for further refining, will not be licensed for export except when it can be demonstrated that the export involves an interchange which will not affect the total quantity or quality of petroleum available to domestic users.

In the case of carbon black feedstock oils, the high export quota reflects the fact that the United States has enjoyed a favorable competitive position in this commodity and has for many years exported about half as much as it consumes domestically.

Licenses issued during the first quarter will be valid for 60 days, except that all will expire on April 30.

To allow for contingencies, including some participation by exporters who have no history of exports during the base period but can demonstrate particular hardship, 5 percent of each commodity quota will be set in reserve before historical shares are determined.

Details of the licensing system are included in Export Administration Bulletin No. 110 of Feb. 7, 1974. Further information is available by calling 202-967-3795.

Standards For 'Jerry Can' Containers Are Drafted

A recommended voluntary product standard which provides performance requirements for plastic "jerry can" containers used to store gasoline and other petroleum products is now being circulated for a determination of its acceptability.

The standard, being developed by Commerce's National Bureau of Standards at the request of the Society of the Plastics Industry, will provide producers, distributors, users and fire code officials with a common basis for understanding the characteristics of the containers.

Circulation of the recommended standards comes at a time of mounting interest on the part of consumers and safety advocates because of the increased storage of gasoline due to soaring prices and short supplies of the fuel.

Some states allow the use of plastic "jerry cans" for the temporary storage of gasoline. Others prohibit plastic containers because of a lack of adequate standards.

When approved, the new safety standard will provide a basis for uniform regulations throughout the country. The standard includes requirements and tests for flammability, softening point, brittleness temperature, aging stability, strength, permeability and petroleum resistance.

Copies of the recommendations, designated TS 125e, "Plastic Containers (Jerry Cans) for Petroleum Products," are available without charge from the Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234. For further information call 301-921-2356.

—*NBS*

Medical Market May Get New Product From Pacific Jellyfish

Prospects favor the development, and possible future marketing, of a substance found in the Pacific jellyfish that can be used to determine calcium concentrations in a person's body and thereby point to the onset of certain severe disorders.

The substance is aequorin, which gives the jellyfish its mysterious glow. With the support of a Sea Grant from Commerce's National Oceanic and Atmospheric Administration (NOAA), University of Washington scientists have found that aequorin can be used to measure minute changes in calcium concentrations in a person's body fluids or cells.

Such changes are said to be early signals of cellular destruction in the body, and to indicate the onset of metastatic carcinoma, bone dysplasia, cardiac dysrhythmias, parathyroid disorder, and others.

Four chemical companies are reported to have indicated interest in marketing aequorin on a test basis, or as a regular item in their catalogue, once the production methods are perfected. When this occurs, it is expected that all available supplies will be used by clinical chemists and physiologists.

Aequorin was first discovered in 1962 by Dr. Frank Johnson and Dr. Osamu Shimomura of Princeton University. The scientists who have demonstrated its value in the measurement of calcium concentrations are Dr. Kenneth Izutsu, a physiologist, and Samuel P. Felton, a biochemist.

The scientists are also able to produce a purified aequorin from the jellyfish, which is found in great numbers in Puget Sound at certain seasons. Known scientifically as Aequorea aequorea, the jellyfish can be seen to glow in the dark if held in a person's hand.

Methods are being developed by the scientists to use aequorin to measure the amount of calcium in such biological fluids as blood, saliva, urine and cerebral spinal fluid.

Aequorin is said to have two advantages over the present methods of calcium determination. It is far more sensitive, and it doesn't require upsetting the balance of the system being measured.

From 600 jellyfish, the scientists report, enough aequorin can be obtained for about 400 calcium measurements, a total of about 35 milligrams of 30 percent pure aequorin.

Aequorin is a protein that contains a non-protein-portion. The non-protein portion is thought to be the light-emitting part of the molecule, but this has not been proven. The luminescence caused by the reaction of calcium and aequorin is measured by a photoelectric cell. Scientists do not yet understand the nature of the reaction that causes the release of energy in the form of light.

Physiological uses for aequorin are expected to be far-reaching, since before its discovery there was no way to test the calcium theory of cell function. This is a theory, currently under investigation by many biologists, which suggests that calcium apparently acts to trigger hormone reactions in cells.

Thus far aequorin has been injected into the large muscle cells of the barnacle and into the giant nerve cells of the squid, both of which are said to be convenient experimental models for human muscle and nerve cells. Scientists say that in both cases the importance of the calcium ion in regulating cell function has been confirmed.

Possibilities for non-medical applications of aequorin, such as studying the role of free calcium in fish spoilage and the role of calcium in hatching fish eggs are being considered.

The investigators have observed the population of the jellyfish after several seasons of catching them for their work. They report that to date there has been no noticeable change in the numbers of the animals in Puget Sound and San Juan waters where they are caught.

Japan Restricts Halibut Fishing In Bering Sea

Japan is imposing restrictions on its fishing fleet this year designed to protect dangerously depleted halibut stocks in the eastern Bering Sea. This important step has been developed as a result of meetings with U.S. and Canadian officials to conserve certain types of food fish.

The Japanese decision is based on recommendations initiated by the International Pacific Halibut Commission and approved in a series of recent meetings with North American officials. Representatives of Commerce's National Oceanic and Atmospheric Administration, whose National Marine Fisheries Service is deeply involved in the U.S. effort to conserve and protect marine resources, participated in the discussions.

These new measures were agreed upon following the annual meeting of the INPFC at Tokyo last November. Japan noted that it would institute certain domestic conservation measures for halibut in the eastern Bering Sea including continuation of the ban on retaining trawl-caught halibut in most areas, increasing the minimum size limit to 32 inches, and other measures including improved enforcement.

Disagreements arise

However, disagreements arose at that meeting concerning proposals made by the U.S. and Canada that Japan further curtail its trawl fishery in the eastern Bering Sea, believed to have a definitely destructive effect on halibut stocks because of the capture of large numbers of juvenile halibut in the fishery's catch.

Robert W. Schoning, Director of the NMFS and a U.S. Commissioner on the IPHC, said the U.S. is pleased at the Japanese decision to take a greater part in international endeavors to protect a valuable marine asset through the expedient of setting a ban on trawling in certain areas and periods to reduce rates of capture and resultant high mortality of juvenile halibut.

Petroleum Experts Meeting To Study Oil Pollution Of Seas

Concerned about increasing petroleum pollution of the world's oceans, experts from 75 nations will meet May 13-17 at the National Bureau of Standards (NBS), Gaithersburg, Md., to work out guidelines for standardized oil pollution measurement techniques.

The Marine Pollution Monitoring (Petroleum) symposium and workshop is co-sponsored by three Commerce agencies, NBS, the National Oceanic and Atmospheric Administration and the Maritime Administration.

Topical sessions will cover:

- Sampling methods and techniques—oil slicks, tar balls and particulates; oil in water; oil in marine organisms and sediments.
- Analytical techniques.
- Standards and intercomparison criteria.
- Data reduction and reporting methods.
- Supporting physical data.

Official conference languages will be English, French, Russian and Spanish, with simultaneous interpretation facilities available.

Franchise Sales Expected To Increase In '74

Franchise sales are expected to rise to $178 billion in 1974, a recent Commerce Department survey indicates. U.S. franchisors estimate that their sales of goods and services will reach a record level of $167 billion for 1973, when all the figures are in, up 16 percent from the $144 billion reported for 1972.

The survey, "Franchising in the Economy, 1972-1974," shows a total of 460,000 franchise establishments in the U.S. in 1973, up 3.3 percent over 1972. The total franchise outlets projected for 1974 is more than 482,000.

Prepared by the Bureau of Domestic Commerce, the survey includes data on sales and services from franchisors to franchisees; number of outlets by industry sector and by kind of ownership; number and location of establishments abroad, and number of franchise outlets owned by minority groups.

The survey shows that franchising opportunities for minority groups continue to broaden.

Data from the survey also indicates the growing importance of franchising in world markets. In 1972, franchisors reported having more than 6,100 outlets in foreign countries. Approximately 45 percent of all foreign-based outlets were located in Canada. However, the growth rate of franchise outlets in other countries is dramatic. U.S. franchise outlets reported in Japan totaled more than 500 in 1972, compared to 50 in 1971. In the United Kingdom the number of outlets rose from 195 in 1971 to almost 600 in 1972.

Based on reports from firms accounting for 98 percent of all sales in franchising, the data show that nearly 3 million persons are employed in this system of distribution.

Rising Government, Business Stars Learn How The Other Half Manages

Government and business no longer live in separate worlds, but there are still enough differences between the two that promising executives in both areas can benefit their organizations and themselves by getting a better line on how the other operates.

Given the growing coordination in so many areas between business and government, the President's Executive Interchange Program was established in 1969 to provide highly talented executives with an opportunity to gain experience by crossing sector lines to work temporarily in government or business during the important middle years of their careers.

James V. Fare, Jr., a Commerce Management Analyst assigned to Ford Motor Company under the program, says "I don't want to speak in platitudes, but I am very much impressed with the way things are done here. This is a very well-managed organization. This is my first time out after ten years in the Civil Service, and I'm really getting a lot of insights into the way things operate.

"I'm working in the area of managerial development and education. We conduct skill training, motivational-behavioral training, and assessment. We focus on developing specific skills that are pertinent to the management job, such as writing, speaking and selling. The assessment center measures job candidates' strengths and weaknesses in a series of managerial situations," Fare says.

"One of the most interesting and educationally rewarding experiences I've ever undertaken. Also, one of the most frustrating," reports Ed Bridges who came from the Tennessee Gas Transmission Co. in Houston, Texas eight months ago to work with Commerce's Bureau of East-West Trade.

"We in industry consider ourselves result-oriented. Government, of course, has to react to other pressures. By the time you adjust, you're just about ready to leave; but it does give one a true idea of what the government decision-making process really is. In that respect, I feel the program accomplishes its goals, and very ably so. All-in-all it's one of those things you look back on and say 'gosh I'm glad I did it.' " Bridges will head a Commerce Department Trade Mission to Austria, Hungary and Russia in March. He also served during the startup phase of the Federal Energy Office.

Other participants in the President's Executive Interchange Program have tackled a wide variety of jobs. For example:

- An executive from a manufacturer of data processing equipment directed a study which assessed the growth of civil aviation during the next 30 years and recommended actions to cope with projected needs.
- A government planner conducted a social audit to help a major American corporation measure the effects of its activities on society.
- A marketing executive from industry serving with the Department of Commerce initiated and directed a domestic information program designed to increase the number of American exporters.
- A purchasing manager from the Department of Defense set up a new purchasing system for a major utility while serving in a senior executive position with the company.

Business candidates for the President's Executive Interchange Program are nominated by the top management officers of their companies. Government candidates are sponsored by the cabinet officers heading their departments. Those selected take leaves-of-absence from their organizations for approximately one year and serve in demanding jobs with host organizations in the opposite sector. The length of the interchange assignment is flexible, however, and may extend up to a maximum of two years.

Salaries are paid by the host organizations, but Presidential Interchange Executives can continue to participate in the various benefit programs offered by their sponsoring organization. Moving expenses are paid by the sponsor.

The President's Executive Interchange Program is limited to the exceptionally high potential business and government executive who:

► has been nominated by the top management level of his company or cabinet officer of his government department.

► has a proven record of management ability and significant on-the-job accomplishments, and a history of handling increased responsibility.

► has the personal traits including high intellect, integrity and well-developed leadership skills which should enable advancement to the senior management level in

Care To Join?

Organizations wishing to sponsor or host a Presidential Interchange Executive can do so by contacting the Commission at any time during the year. To date, most of those participating in the program have been nominated by their sponsoring organizations prior to May 1, have been placed in a position with a host organization by June 15, and have begun their assignments in August or September. This chronology need not always apply, as there is a continuing demand for Presidential Interchange Executives throughout the year. For details, call 202-632-6834.

the sponsoring organization.

► is generally in the 28-38 age range.

► is a citizen of the United States.

Past and present members of the President's Commission on Personnel Interchange give some idea of the importance which the country's leading firms attach to the program: A. W. Clausen, President of the Bank of America; Werner P. Gullander, President of the National Assn. of Manufacturers; Herman L. Weiss, Vice Chairman of the Board at General Electric, who also has been acting as Commission Chairman; David Packard, Chairman of the Board at Hewlett-Packard Co.; W. F. Rockwell Jr., Chairman of North American Rockwell. Commerce Under Secretary John K. Tabor and Federal Energy Office Administrator William E. Simon are senior members of the Commission.

Coastal Conference Set For Charleston In March

To define the national interest in coastal zone management, industry, conservation and government leaders will confer in Charleston, S.C., March 13-14. The conference is intended to provide insight into the handling of those major coastal issues that require a national perspective.

Commerce Secretary Dent and Senator Ernest Hollings head the list of speakers including Elvis Stahr, President of the Audubon Society and Assistant Secretary of the Interior Nathaniel Reed.

The conference will be sponsored by Commerce's National Oceanic and Atmospheric Administration. It will bring together, according to Dr. Robert M. White, NOAA Administrator, "local, state and federal officials, as well as leaders of the private sector to work toward better understanding of the concept of the national interest in the coastal zone. We hope to develop agreement on how best to accommodate this concept under the provisions of the Coastal Zone Management Act of 1972."

Under the provisions of that act, the Federal Government must ensure that participating coastal states include "adequate consideration of the national interest" in order for their state's coastal zone management programs to qualify for federal approval.

Among issues involving the national interest to be addressed are:

- Siting of offshore and coastal power facilities;
- Siting of deep-water ports;
- Living marine resource development and protection;
- Coastal recreation.

The sessions will be held at the Mills Hyatt House Hotel.

Information Resources Expo Set

Information users and their information, communications and publisher counterparts will review "The Information Marketplace" at a three-part meeting and Resources Exposition in Washington March 18-21.

The meeting, sponsored by the Information Industry Association, will feature management forums on the opportunities and responsibilities of the information business, user workshops for evaluating products and the Information Resources Exposition, exhibiting the products of the industry.

Dr. Betsy Ancker-Johnson, Assistant Secretary of Commerce for Science and Technology, will address the exposition review reception March 18. Dr. Ancker-Johnson is honorary chairwoman of the exposition.

Workshop topics include "Creative Utilization of Corporate Information," and "New Developments in the Indexing and Bibliographic Control of Government Documents."

Management forums will include discussions of "Private Sector Information Dissemination" and "International Trade In Information."

Registration material is available from the IIA, 4720 Montgomery Lane, Bethesda, Md. 20014.

Calendar For Businessmen

Feb. 20 — Washington, D.C.—Exploring the Limits to Growth in Telecommunications, symposium at U.S. Department of Commerce Auditorium. Sponsors: FCC, Office of Telecommunications. Contact Paul Polishuk at 967-5171.

March 3-9 — Asheville, N.C.—National Rural Development School, sponsored by U.S. Department of Agriculture. For information, Tom Pugh, USDA, Washington. Phone: 202-447-2573.

March 12-14 — Washington—National Association of State Development Agencies Conference. For information, Jack Cawthorne, Washington. Phone: 202-331-7880.

March 14—Douglas, Ga.—Minority Enterprise Workshop at South Georgia College. For information, Max W. Harral, P.O. Box 1276, Waycross, Ga. 31501.

March 29-31 — Durham, N.H. — National Industrial Development Association advanced seminar at University of New Hampshire. For information, Robert L. Kiley, Salisbury, Md. Phone: 310-749-1251.

April 1-4 — Detroit — Water and Wastewater Equipment Manufacturers Association industrial environmental conference and exposition. For information, WWEMA, Room 3401, 744 Broad St., Newark, N.J. 07102.

June 5-6 — Chicago — Environmental law course for non-lawyers. For information, Nancy McNerney, Director of Information, Government Institutes, Inc., 4733 Bethesda Ave., NW, Suite 303, Washington, D.C. 20014. Phone: 301-652-3420.

INTERNATIONAL COMMERCE REPORT

- **Washington Official Trade Briefs**
- **Report by Trade Mission to Eastern Europe, USSR**
- **Results of U.S. Trade Center exhibitiions**
- **Economic trends in Italy, Israel, Denmark, Hong Kong, Spain**
- **New tariff situation in Western Europe**
- **Worldwide investment, trade opportunities**

'V.I.P.' Treatment Brings In Foreign Buyers

Obviously strong international interest in U.S. equipment for the tourism industry and institutional uses, combined with a special "V.I.P." world attendance campaign, produced a 150 percent increase in foreign visitors at a recent U.S. trade exhibition.

It happened at the National Hotel & Motel Educational Exposition, held in the New York Coliseum.

The exposition's management has reported total foreign registration of 4,923 during the Nov. 5-8 show, up from 2,073 in 1972. Total attendance was about 70,000. Biggest attendance increases, by country, were recorded from Austria, Belgium, Denmark, West Germany, the Netherlands and Japan. Largest national totals were the Netherlands' 772 visitors and England's 625. Thirty-nine foreign countries or regions were represented at the show.

"V.I.P." stands for "Visit, Investigate, and Purchase"—the concept developed by the New York Regional Export Expansion Council, under the leadership of Howard G. Sloane, to attract large numbers of foreign businessmen-buyers to major U.S. industry exhibitions as a direct stimulus to American export sales.

The concept includes personal invitations distributed overseas to prospective buyers, assistance with their travel plans, and special attention at the show, including distinctive badges and a "V.I.P." lounge.

Post-show survey

The Commerce Department's New York District Office now is conducting a post-show survey among U.S. exhibitors in the hotel exposition to measure actual export sales growth and other specific actions such as foreign agent and distributor agreements that were made as a result of contacts with "V.I.P." attendees.

Commending the business, travel and Government organizations that worked together in the year-long promotional effort, Arthur C. Rutzen, Commerce Department's New York District Office Director, said: "Some of the show exhibitors were newly exposed to international buyers through this V.I.P. approach; now they have only to follow through with leads and contacts established to expand their own marketing and help the nation's trade position as well."

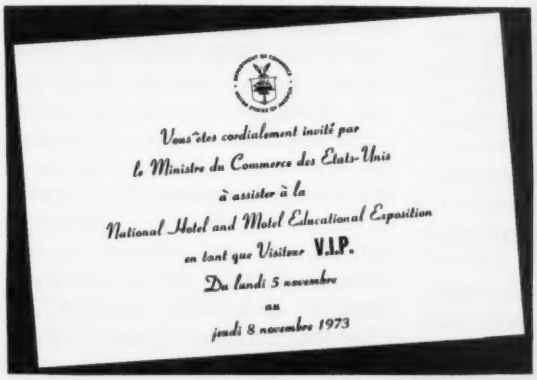
A postscript: The successful V.I.P. Program effort having underscored the resolve to develop worldwide interest in the U.S. show, the management has just renamed its enterprise as the International Hotel & Motel Educational Exposition. Officials have already embarked on European travel to promote the 1974 show and invite participants, beginning at the London Hotelympia 74 show.

"International interest in our show has been growing steadily," said Jack Egan, general manager, "but we wanted to be absolutely certain that this trend was here to stay before we took the step to alter our name."

EMBER 5-8
TRADE ONLY
58TH NATIONAL HOTEL & MOTEL

THE "V.I.P." TREATMENT—*Overseas visitors are greeted in the V.I.P. Lounge at right by (standing, from left) program leaders Howard G. Sloane and Arthur C. Rutzen. Next year the word "International" goes on marquee above, and in aisles below.*

THE PORT OF NEW YORK



Vous êtes cordialement invité par
le Ministre du Commerce des Etats-Unis
à assister à la
National Hotel and Motel Educational Exposition
en tant que Visiteur V.I.P.
Du lundi 5 novembre
au
jeudi 8 novembre 1973

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Washington's

Official Trade Briefs

This article is another in a series of reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Staff's Office of International Trade Policy.

THE PRESIDENT

President Nixon issued a proclamation on Jan. 2 authorizing additional import quota quantities of cheddar cheese, and cheese and substitutes for cheese containing, or processed from cheddar cheese. The existing annual quota on cheddar cheese was increased by 100 million pounds. The 100 million pound additional quota will be allocated among supplying countries as follows: New Zealand, 55 million pounds; Australia, 12 million pounds; and all other countries, 33 million pounds. The current action followed a determination by the Secretary of Agriculture that existing conditions with respect to cheddar cheese required emergency treatment. The additional quantities may be imported not later than March 31, pending further action by the President upon receipt of the report and recommendation of the Tariff Commission.

The President on Jan. 25 issued a proclamation which suspends as of Jan. 26 the import quotas on wheat and wheat milled products until June 30.

THE CONGRESS

Committee Action: The Senate Finance Committee has released a study entitled "World Oil Developments and United States Oil Import Policies" prepared by the Tariff Commission. The study was prepared for the Committee before the most recent events in the world petroleum markets occurred. The information base generally does not extend beyond mid-1973.

Committee Hearings: The Multinational Corporations Subcommittee of the Senate Foreign Relations Committee began hearings Jan. 30 on the international petroleum industry.

Votes: The House failed by a vote of 248 to 155 to pass H.R. 11354, to provide for increased participation by the United States in the International Development Association, which is often described as the "soft loan" unit of the World Bank Group. The House also rejected a motion to recommit the bill to the Committee on Banking and Currency.

By a voice vote, the House agreed to H.Res. 780, providing for consideration of H.R. 11666, to provide for increased participation by the United States in the Asian Development Bank.

The Senate postponed indefinitely consideration of H.R. 8547, to amend the Export Administration Act.

New Legislation: Since the opening of the 93rd Congress, some 522 trade and related bills have been introduced. Legislation not previously reported in the Trade Briefs column includes H.R. 11473, to prohibit importation into the United States of meat or meat products from livestock slaughtered or handled in connection with slaughter by other than humane methods; H.R. 11481, to prohibit export of the energy resources of the U.S.; H.R. 11795, to amend the Export Administration Act of 1969, to prevent the excessive drain of iron and steel scrap from the U.S.; H.R. 11572, to provide for imposition of an embargo on the shipment of goods and materials to Arab nations; H.R. 11664, to amend the Export Administration Act of 1969, to provide a formula to control the exports of wheat, soybeans and corn from the U.S., and for other purposes. Also, H.R. 11797, to amend the personal exemption provisions of the Tariff Schedules of the United States to exclude from duty-free treatment thereunder all alcoholic beverages and cigarettes entered by any non-resident for gift purposes and all cigarettes in excess of 200 entered by any resident for personal use; H.R. 11810, to amend the Export Administration Act of 1969 to prohibit export from the U.S. of oil drilling equipment; H.R. 11830, to suspend the duty on synthetic rutile until the close of Dec. 31, 1976; H.R. 11875, to suspend for 6 months the duties on certain denim; H.R. 12054, to suspend for a 3-year period the duty on certain wire rods of iron or steel; H.R. 12055, to amend the Economic Stabilization Act of 1970 to exempt stabilization of the price of oil country goods from its provisions; H.R. 12067, to limit export of raw materials from the U.S. whenever any domestic person or the United States establishes and operates a plan for allocation of such raw materials; H.R. 12057, to amend the Foreign Assistance Act of 1961 with respect to the Overseas Private Investment Corporation; H.R. 12211, entitled the Emergency Export Control Act of 1974.

Also, H.R. 12247, to prohibit the use of U.S. fuel to train commercial airline and military pilots who are nationals of any foreign country which places an embargo on its shipment of petroleum products to the United States; H.R. 12335, to establish a temporary embargo on export of certain chemical fertilizers; H.R. 12391, to amend section 232 of the Trade Expansion Act of 1962 to prohibit imposition under the authority of that section of duties, taxes, or fees on import of petroleum and petroleum products, and for other purposes; H.R. 12478, to authorize and require the President of the United States to establish a mechanism to ensure that articles, materials, and supplies which are exported from the U.S. are not sold abroad at higher prices than the prices at which comparable articles, materials, and supplies are sold in the U.S.

TARIFF COMMISSION

Investigations—under section 22 of the Agricultural Adjustment Act: The Tariff Commission, in an interim report to the President, unanimously recommended that the President suspend until June 30 import quotas on **wheat and wheat milled products.** The import quotas could be suspended, the Commission found, without any adverse effects on wheat programs now being conducted by the Department of Agriculture.

On Jan. 27, after an investigation, the Commission found that the temporary quotas which permitted increased imports of **butter and butter oil** in November and December 1973 did not adversely affect the price-support programs of the Department of Agriculture. The Commission recommended that no changes be made in the temporary quotas established by the President.

The Commission on Jan. 24 recommended that the President establish an additional import quota to permit entry of 265 million pounds of **nonfat dry milk** in 1974. The Commission recommended that the quotas on **animal feeds containing milk** not be changed.

Investigation — under section 351(d)(3) of the Trade Expansion Act of 1962: The Commission on Jan. 21 reported to the President that termination of the current escape clause action rate of duty on **imported pianos (except grand pianos)** would not significantly affect the competitive position of the industry producing such pianos.

Supplemental Report, Ball Bearings: On Jan. 28, the Commission submitted to the President a supplemental report containing additional information relating to its investigation (No. TEA-1-27) of **antifriction balls, ball bearings, and parts thereof** under section 301(b)(1) of the Trade Expansion Act of 1962.

Dumping Cases: On Jan. 5, the Tariff Commission notified the Secretary of the Treasury that an industry in the United States is *not* and is not likely to be injured by reason of imports from Japan of **acrylonitrile-butadiene-styrene type of plastic resin in pellet and powder form** sold at less than fair value (LTFV).

The Commission on Jan. 10 notified the Secretary of the Treasury that an industry in the United States is being, or is likely to be, injured by reason of LTFV imports of **primary lead metal** from Australia and Canada. As a result of the Commission's finding, these imports will be subject to special dumping duties.

Dumping duties will not be imposed on **certain metal punching machines (single-end type, manually operated)** from Japan. The Commission issued a finding on Jan. 10 stating that an industry in the United States is not being injured by reason of imports of these metal punching machines.

Having received advice from the Treasury Department on Jan. 14 that **hand-operated pistol-grip type liquid sprayers** from Japan are being, or are likely to be, sold at LTFV, the Commission on Jan. 16 instituted an investigation under section 201(a) of the Antidumping Act of 1921, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

On Jan. 15, the Commission notified the Secretary of the Treasury that an industry in the United States is not being or is not likely to be injured, and is not prevented from being established, by reason of imports from Canada of **iron and sponge iron powders** sold at LTFV.

Dumping duties will be imposed on **racing plates (aluminum horseshoes)** from Canada. The Commission on Jan. 24 notified the Secretary of the Treasury that an industry in the United States is being injured by reason of imports from Canada of these plates that are being sold at LTFV.

Adjustment Assistance—Firms: The Tariff Commission reported to the President on Jan. 2 that the Green Ball Bearing Co., Cleveland, does not meet the requirements of the Trade Expansion Act of 1962 for applying to the Department of Commerce for adjustment assistance.

On Jan. 25, the Commission reported to the President that the Globe Corp. **(men's clothing)** of Cincinnati does not meet the requirements of the Trade Expansion Act of 1962 for applying for adjustment assistance to the Department of Commerce.

Adjustment Assistance — Workers: The Tariff Commission has opened investigations into the effect of imports on three petitioning groups of former workers at the following plants: Eaton Corp., Detroit **(automotive springs, clutch discs, and rear deck torsion bars)**; Milford Shoe, Inc., East Corinth, Me. **(footwear for men and women)**; and Fred Braun Workshops, Inc., New York **(footwear for women).** An investigation also was opened on behalf of workers and former workers of the Westland Shoe Corp., Biddeford, Me. **(footwear for men and women).**

The Commission determined on Dec. 28, 1973 that the former workers of P & D Manufacturing Division of Bendix Corp., Long Island City, N.Y., who produced **car engine parts,** are ineligible to apply for adjustment assistance.

As a result of a positive determination by the Commission on Jan. 4, former workers of the Owensboro, Ky., plant of the General Electric Co., who produced **electronic receiving tubes and tube mounts,** are now eligible to apply

INTERNATIONAL MARKETING SEMINAR AFLOAT—*Another summer seminar on board a campus cruise ship is being planned by Cossman International Programs, Hollywood, which cooperated with the World Campus Afloat of Chapman College, Orange, Calif., in such a venture in 1973. The 1974 seminar will visit Italy, Yugoslavia, the USSR, Romania, Turkey, Greece, Israel and Cyprus from July 4 to Aug. 1. Shown here (from left) are seminar director E. Joseph Cossman, and Taipei Bank of America manager William T. Pauly, with their wives, as they addressed the 1973 seminar in Taiwan, en route to Korea, Japan and Hawaii from Hong Kong.*

to the Secretary of Labor for adjustment assistance.

The Commission on Jan. 15 reported to the President that former workers of the Motor Components Division, Elmira, N.Y., plant of the Bendix Corp. **(bicycle coaster brakes)** are ineligible to apply for adjustment assistance.

On Jan. 25, the Commission reported to the President that workers of the Globe Corp. **(men's clothing)**, Cincinnati, do not meet the requirements of the Trade Expansion Act of 1962 for applying to the Department of Labor for adjustment assistance.

Section 337 (Unfair Import Competition) Cases: On Nov. 5, 1973, the Tariff Commission received a complaint under section 337 of the Tariff Act of 1930, filed by the National Lock Hardware Co., a division of Keystone Consolidated Industries, Inc., Rockford, Ill. They alleged unfair methods of competition and unfair acts in the importation and sale of **certain garage door locks.** Globe International Corp., Philadelphia, has been named as importing and offering for sale the subject product. The Commission has initiated a preliminary inquiry into the issues raised in the complaint to determine whether there is good and sufficient reason for a full investigation.

The Commission received a complaint under section 337 of the Tariff Act of 1930, filed by the Vernitron Corp., Bedford, Ohio, which alleged unfair methods of competition and unfair acts in the import and sale of **piezoelectric ceramic 10.7 MH$_z$ electric wave filters.**

The Commission has rescheduled to March 12 the public hearing to be held in connection with investigation No. 337-33 concerning **certain disposable catheters and cuffs therefor.**

On Jan. 30, the Commission dismissed investigation 337-22 regarding alleged unfair methods of competition and unfair acts in the import and sale of **certain cylinder boring machines and boring bars,** the construction features of which are alleged to be embraced within the claims of U.S. Patent Nos. 3,260,136 and 3,273,423.

OTHER AGENCIES

Treasury—Dumping: The Treasury Department on Jan. 15 announced action on three investigations under the Antidumping Act.

A tentative discontinuance was issued in the case of **mandelic acid** (used as primary ingredient for a pharmaceutical drug called methenanine mandelate) from England on Oct. 3, 1973, and a tentative discontinuance was issued on mandelic acid from Japan on Oct. 5.

In the third case, Treasury has issued a dumping finding with respect to **expanded metal of base metal** (used primarily as flooring) from Japan.

Treasury on Jan. 8 announced a tentative determination to modify the dumping duty on **potassium chloride** from Canada with respect to five companies (Kalium Chemicals, Ltd.; Potash Co. of Canada, Ltd.; Potash Co. of America; International Minerals and Chemical Corp.; and C. F. Industries, Inc.). These companies are no longer selling, or likely to sell, potassium chloride in the United States at LTFV within the meaning of the 1921 Antidumping Act as amended.

On Jan. 14 the Department announced that **hand-operated liquid sprayers** from Japan are being sold at LTFV. The case will now be referred to the Tariff Commission for a determination as to whether an American industry is being, or is likely to be, injured.

Treasury on Jan. 16 issued a dumping finding with respect to **calcium pantothenate** (a member of the B-complex family of vitamins produced in both U.S.P. and feed grades) from Japan.

Export-Import Bank of the United States: The Board of Directors of the Export-Import Bank of the United States announced that the Bank was raising its interest rate on loans from 6 percent to 7 percent per annum, effective Feb. 4. Outstanding credit authorizations and preliminary commitments will be governed by the interest rate provisions of those authorizations and commitments.

TRADE GROUP IN PRAGUE—*Mission member Martin W. Gangel (left), president of Dalton, Cooper & Gates Corp., discusses business with official of Czechoslovak Chamber of Commerce and Industry (center) and Czechoslovak businessmen.*

East Europe, USSR Favorable Markets For Farm Equipment

Bulgaria, Czechoslovakia, and the Soviet Union offer attractive opportunities to U.S. businessmen in the field of agricultural and irrigation equipment and supplies, according to a Commerce Department trade mission that recently visited these countries.

Bulgaria's just-published annual plan indicates that agricultural output will increase by five percent this year. Czechoslovakia's next five-year plan is to be in preparation—usually a prime period in which to discuss requirements with end-use ministries in centrally planned economies—during the first half of this year. As for the USSR, a goal of six percent agricultural growth has been set for 1974.

The 13-member mission was composed of representatives of U.S. firms marketing a wide range of farm implements, grain transportation and drying equipment, machinery used in raising swine and chickens, irrigation equipment, and agricultural chemicals. The group was headed by Roger Stechschulte of Commerce's Bureau of East-West Trade.

For Bulgaria, both ways

During discussions in Sofia, according to Director Stechschulte, officials of the highest levels of the Bulgarian government made it clear that the country is interested in expanding business relations with the United States and that agricultural, irrigation, and food-processing equipment and services are considered a prime area in which to begin. They also made it clear, he pointed out, that they are not interested solely in purchases from the United States. They also want industrial cooperation with U.S. companies — arrangements in which Bulgarian enterprises are licensed to produce for sale in Bulgaria, other parts of Eastern Europe and/or hard currency areas, or transactions involving Bulgarian production of components. The country is also interested in selling its products in the United States and other Western nations.

Bulgaria's agricultural sector is organized into 160 large agrarian-industrial complexes, averaging some 62,500 acres. A current program will change the structure of the rural economy, establishing agricultural "factories" which would begin the production process with raising the seed and end it with the finished food product ready for the Bulgarian consumer or the export market. These large units seem particularly suitable, said the mission director, for agricultural equipment and techniques used in large units in the United States. The mission visited the Parvenetz agrarian-industrial complex near Plovdiv.

In meetings with the Deputy Prime Minister and with officials of the Ministry of Agriculture, specific interest was expressed in combines, pumps, discs, equipment for cattle and animal growing, machinery for transporting and drying grain, automatic spraying equipment, pumping stations for irrigation, equipment for processing foods, certain harvesting equipment, fungicides and pesticides, poultry breeding and processing equipment. The Deputy Prime Minister noted that Bulgaria plans to invest $5 billion in agriculture and related industries over the next decade.

Recent official decisions, Stechschulte reports, aim to "marry" Bulgarian agricultural resources and institutions with the highest technology available anywhere. It is obvious, he said, that the Bulgarians view the United States as a likely source of this technology. Officials encourage U.S. firms interested in doing business there to send product literature to the Chamber of Commerce and Industry, 11a Alexander Stamboliski Blvd., Sofia, and/or to exhibit at the Plovdiv fair Sept. 3-10.

Less centralization

Czechoslovakian agriculture is not as highly centralized as that of Bulgaria, but it requires certain

ALSO IN PRAGUE—*J. Ward McConnel, Jr., president, McConnel Manufacturing Co., Inc. (center), describes firm's products to Czechoslovak businessmen.*

specialized equipment — providing opportunities for U.S. firms. The agrarian sector is composed of some 5,300 cooperatives averaging about 1,900 acres each and some 300 state farms averaging 7,500 acres each. The cooperatives are being merged into the state farms, with 800 cooperatives to be merged this year.

In Prague, mission members met with officials of various ministries, research institutes, and foreign trade organizations. The Deputy Minister of Agriculture and Food noted that while the country is self-sufficient in tractor and certain harvesting equipment, it is interested in machinery and technology to improve poultry and swine production. Other interests include irrigation equipment, cultivators, agricultural chemicals, seed grain equipment and supplies.

In Bratislava, as in Prague, the mission found potential markets in equipment for swine and poultry raising. In addition, though not directly related to the mission's specialization, discussions were held with Slovak officials about opportunities presented by the Danube port expansion, expected to begin in 1974.

The Czechoslovaks, like the Bulgarians, are interested in industrial cooperation arrangements. The high level of development of their manufacturing industry should make this an attractive possibility for U.S. industry.

In USSR, high priority

The Soviet Union continues to place high priority on expansion and modernization of its agriculture and related industries; thus, mission members were eagerly received. According to Soviet press reports, the USSR is ready to begin a shift from smaller units to more productive enterprises, merging resources and equipment. There are currently some 32,000 collective farms and 15,000 state farms.

The U.S. business group found interest in agricultural and irrigation equipment, on a direct purchase basis and through co-production and licensing. Poultry and swine raising equipment again attracted a good deal of attention. A program of construction of large grain storage facilities sparked interest in grain moving equipment. It was indicated that the Soviets wanted to buy—not produce—fruit harvesting equipment; specific intererest was evinced in cultivators, reversible plows, and large-scale harvesting equipment.

As in Prague, mission members met with representatives of appropriate ministries and foreign trade organizations.

The mission participants came away from Moscow, as from the other cities they visited, feeling that they had made "useful first contacts with buying organizations and end-use ministries and that follow-up efforts would be required if sales were to be made," Stechschulte concluded.

U.S. businessmen comprising the mission were: Herbert P. Bure, Ellicott Machine Corp., Baltimore; Norris W. Carnes, Universal Oil Products, St. Paul; George C. Duvall, Chik Master Incubator Corp. and Gainesville Machine Co., Cleveland; L. W. Firstenberger, Floway Pumps, Fresno, Calif.; Martin W. Gangel, Dalton, Cooper & Gates, New York; Elbert J. Guyer, Moridge Manufacturing, Moundridge, Kan.; Rogers E. Hart, Dunbar Kapple, Batavia, Ill.; Donald Jones, Borg-Warner, Chicago; Frank R. Laurenz, Agricultural Research & Development, Eagle Butte, S.D.; J. Ward McConnel, Jr., McConnel Manufacturing, Prattsburg, N.Y.; Philip Mueller, Olin-Chemicals, Stamford, Conn.; and Bodo Warnecke, Oppenheimer Intercontinental, Mobile, Ala.

Bulgaria Invites U.S. Firms To Electronics Seminar

The Government of Bulgaria invites U.S. exporters, experts, and manufacturers to attend the Fifth International Symposium — Radio Electronics '74, to be held at Varna, June 15-19.

The symposium will take place in the sea resort area of Druzba. Topics to be discussed will include: quasi-electronic and electronic communication systems; computer applications in designing and control of radio-electronic systems; VHF application in radio-relay systems, in radio-location, television, and multiplexing systems. Simultaneous translation in English and Russian will be available.

Information can be obtained from: Scientific and Technical Union of Electro-Engineering—Sofia, Rakovski Str., P.O.B. 612, Bulgaria.

Trade Fairs, Centers

ELECTRONIC ENGINEERING
CO OF CALIFORNIA
TAPE PUNCHES

PARIS TRADE CENTER—*Agent for EECO in France, Mr. Terrise (second from right) explains to visitor at computer show firm's paper tape reader, new to French market. Looking on, Michael Campo, who opened EECO office in London last year.*

Results From U.S. Computer Show Top Previous Paris Trade Center Records

An end-of-show report from the U.S. Trade Center's Computers and Related Equipment Exhibition in Paris last month marks the event as a record-breaker: sales results top those of every show held at the Center since it was opened in 1969.

Eleven of the 46 exhibitors project sales in the next 12 months at a million dollars or more each. One of the 11, Decision Data Computer Corp., estimates that such sales of its reader and reader punches will reach $5 million.

The new-to-market participants estimate their orders during the next year at almost $10 million. One such firm, Identicon Corp., exhibiting its equipment for the first time in France, appointed two agents—one in France, the other in Switzerland.

Floor sales by all participants totaled $355,840.

As a result of rapid business expansion and increasing labor shortages, French management is seeking to make data handling operations more efficient. More than $7 billion is expected to be spent on EDP systems between 1972 and 1977; imports will supply around $2.5 billion of this amount. U.S. firms now have and should maintain a strong lead in the import market.

MILER TRONICS INC.
R O M
PROGRAMMING
SYSTEMS

PROGRAMMER, DUPLICATOR—*Trent Brown (second from right) of Miler Tronics, Inc., new-to-export exhibitor, describes operation of firm's product.*

Japan Electronics Exhibition Open To U.S. Participants

U.S. electronics firms interested in entering the Japanese market have an opportunity to exhibit their products at the Japan Printed Circuit Association show in Tokyo June 1-4.

The JPCA show — attracting electronics engineers from a variety of fields including the most influential in design and purchasing—will be open this year for the first time to non-Japanese exhibitors. Products displayed will include materials, related machinery, parts, and manufacturing equipment.

The '74 exhibition will be sponsored by JPCA, with the endorsement of the Ministry of International Trade and Industry and with the cooperation of *Dempa Shimbun,* the daily electronics newspaper published by Dempa Publications, Inc. A specialized technical program, and seminars on up-to-date printed circuit and related techniques, reliability, and labor-saving technology, will accompany show activity.

Write: Japan Printed Circuit Association, Yoshida Bldg., 21, Kamiyacho, Minato-ku, Tokyo, Japan.

17 REYNOLDS ALUMINUM EXPORT CORP.
Busca Representante

WRAPPING IT UP—*Roy Martin, center in striped suit, manager of Product and Equipment Engineering Packaging Division, Reynolds, demonstrates his plastic wrap machinery to interested prospects at U.S. Trade Center show, Mexico City.*

U.S. Packaging Equipment Sells Well At Trade Center Show In Mexico City

Pinpointing one of Mexico's leading import markets, an exhibition of U.S. packaging machinery held late last year in Mexico City recorded floor sales totaling almost $800,000.

Despite strong efforts by Mexican suppliers to manufacture locally, much of this equipment—especially the more advanced kinds—will continue to be supplied from foreign sources.

Reflecting the concentration of packaging companies in metropolitan Mexico City, where the U.S. Trade Center housed the exhibition, only about eight percent of the almost 1,500 trade visitors were from outside the area; but several came from as far away as Central America.

Of the 32 participants representing 38 companies, 13 were new to the market. These firms expect sales in the next 12 months to approach $1.5 million. Seven export representatives were appointed during the exhibition.

Weist Industries, Inc., Louisville, Ky., reported a brisk interest in its bag making machine, which is engineered for sale in foreign markets. H.L. Stoker Co., Claremont, Calif., showing augur and air packers, was a repeater from the Trade Center's inaugural show in 1972. The company sold three machines off the floor. "We'll be back," commented sales manager William P. Calles.

Soabar Co., Philadelphia, reported a constant interest in its ticket-marking equipment, resulting in great expectations for sales. Matthews International, Pittsburgh, effectively displayed its markers and coders. Vice President Don Edwards reported, "Very good attendance by high quality prospects." Labelette Co., Forest Park, Ill., markets a simple labeling machine. The local representative said he was swamped with inquiries.

Among other products attracting high interest were hot-melt adhesive application equipment, a vacuum forming machine, industrial printers, stitchers, wrappers, cappers, weight checkers, and a flexographic printing and die cutting machine.

Pollution Control Items In Sydney Found The Buyers

"We were extremely happy with all aspects of the exhibition. It would have taken us a good twelve months to see the people we contacted during the show. We certainly couldn't afford to miss any future Trade Center promotions," said the Scientific Industries Australasia representative.

"The quality of attendees was high. We were getting to people who normally would be very difficult to reach," was the verdict of the DuBois Chemicals man.

"Excellent quality of visitors, we have certainly achieved all of our objectives in participating. A very rewarding show," reported M.S.A. (Australia).

Those are three Australian representatives' reactions to the recent Instrumentation for Pollution Control Exhibit at the U.S. Trade Center in Sydney. The 32 U.S. firms which were represented reported off-the-floor sales of $238,000, and the six which were new to the Australian market expect an additional $308,000 in sales in the year following the exhibit.

From broad area

A total of 1,860 sales leads were developed from the 824 registered visitors, who also returned 255 flyer coupons requesting more literature on specific products.

Attendees traveled to Sydney from such places as Perth, 2,500 miles away, and Northern Queensland, over 800 miles away to see what is being done in the field of pollution control. One of the innovations at this particular exhibition was a continuous showing of environmental and pollution control films and effective means being taken in the United States, Australia, and other areas to combat pollution.

BIOMEDICAL INSTRUMENTS SHOW *—Don Adsit of Medrad International Sales Corp. displays his company's angiographic injection system during recent exhibition at Trade Center, Tokyo.*

Medical Display Draws Visitors To Tokyo Center

"We appreciate the visitors' enthusiastic interest in our new instruments . . . we expect good business in the future." With this appraisal, a representative for Electro-Medical Systems, Inc., wound up his participation in the biomedical equipment show last month at the U.S. Trade Center, Tokyo.

"The show was outstanding in arrangements and attendance," said a Getz Brothers & Co., spokesman.

Forty-six U.S. firms exhibited their equipment. Of the participating companies, eight had not exported before and 15 were new to the Japanese market. Off-the-floor sales for these newcomers totaled more than $116,000, and they project their 12-month sales at $3.4 million. More than 300 visitors attended on the first day; the number rose on each successive day, culminating in a total of 2,400 registered visitors for the five-day show.

Modern Merchandise Modes Attract Sales At Show In Stockholm

The Modern Merchandising Exhibition at the U.S. Trade Center for Scandinavia in Stockholm last month drew 600 trade visitors and produced more than $600,000 worth of off-the-floor sales.

Of the 21 exhibitors, 6 were new to export and 8 others were new to this market. These newcomers to the Scandinavian markets estimate their sales in the next 12 months at $3 million. Nine exhibitors were seeking representation in Scandinavia and nine agents/distributors were appointed during the show. Another three agreements are expected to be signed soon.

One of the new-to-export exhibitors, Aldon Industries, Inc., Penn Valley, Pa., displayed broadloom carpeting and area rugs. Herbert Barg, chairman of the board, reported $60,000 in immediate sales, one-year projected business of $750,000, and said, "Good program to get started in the market."

Knogo Corp., of Westbury, N.Y., new to the market, featured its antishoplifting system. Anthony Guiliano, vice president, reported $700,000 in sales over the next 12 months. Representatives will be appointed for Sweden and Finland shortly from candidates contacted at the exhibition. Guiliano commented: "Work of staff at Center in obtaining and following leads must be rated excellent."

MSI Data Corp., of Costa Mesa, Calif., also a new-to-market firm, displayed portable data terminals for data entry at the source. Bruce B. Sherr, managing director, reported immediate sales of $500,000 and projected first-year business of $750,000. He stated: "Excellent introduction of our product. We are now scheduling a between-show promotion in the Stockholm Trade Center for May."

FLORIDA JUICE VENDORS

MODERN MERCHANDISING—*At the Stockholm U.S. Trade Center, new-to-export firm Florida Juice Vendors, Inc., displayed its machines for juices from concentrate. Company president Bert E. Roper (left) serves interested visitors a sample while explaining the operation of his vending machine.*

Worldwide Business Outlook

Italian Outlook Favorable Despite Oil Uncertainties

Despite uncertainties arising from the petroleum embargo, many indicators of long-term growth and trade for Italy remain "go", reports Albert L. Zucca, Commercial Counselor at the U.S. Embassy in Rome.

Over the long haul Zucca sees the outlook for marketing of sophisticated American products as extremely good. Italian industries continue to look to the United States as a prime source of high technology-oriented products, and the combination of major cost increases in Italy, the need to implement delayed investment programs and the greater attention given to labor-saving equipment all underscore, for the Italian planner, the enhanced desirability of American machinery and industrial processes.

The major preoccupation for Italian planners is the effect of the oil embargo on Italian economic growth. The activities most directly affected which could suffer fairly rapid reductions in production are the automotive and automotive service industries including spare parts, tire manufacture, and metalworking; paints, plastics, synthetics (including synthetic fibers and resins); and the tourist industry including service industries such as inns, restaurants, amusements, theaters, etc.

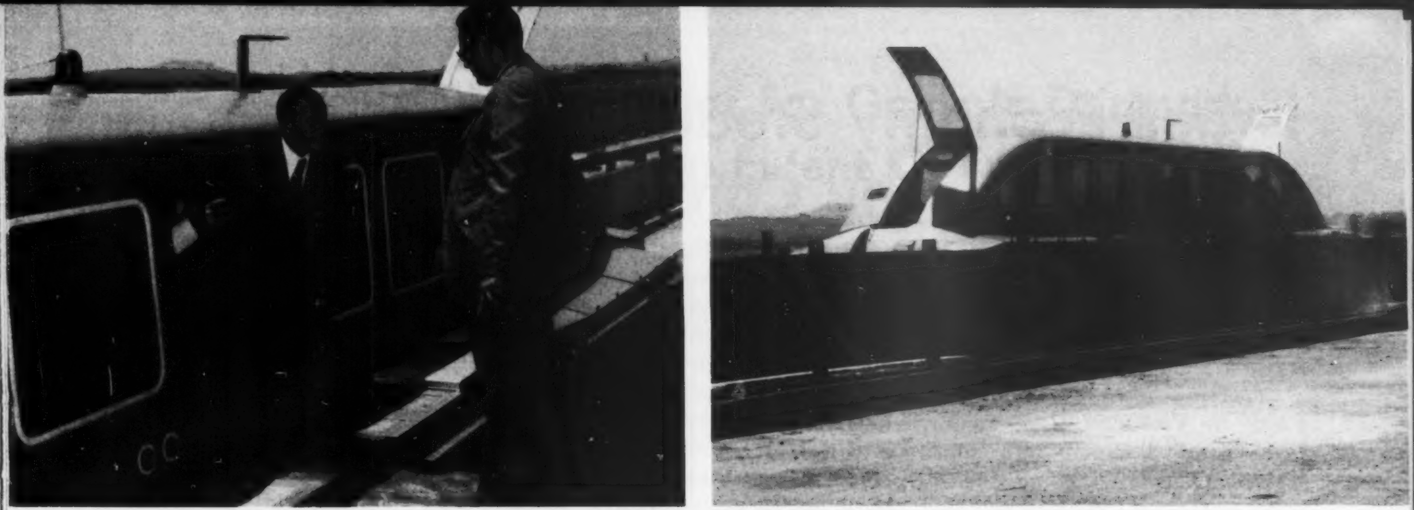
EMBASSY SEMINAR—*Commercial Counselor at the U.S. Embassy in Rome Albert L. Zucca (left), author of this article, checks out a liquid chromatograph at a seminar run by the local agent (Italdisi) for Waters Associates of Framingham, Mass. Italdisi technicians prepare to demonstrate the instrument to visitors.*

Economic questions also arise from the possible adverse impact on the investment climate of tax reform which went into effect Jan. 1; price inflation which continues to erode wage gains made by labor; and uncertainties in the international monetary situation.

Despite the improved outlook for U.S. sales, American exporters must bear in mind that there are factors working against a dramatic increase in our share of the Italian market. We must compete with some European manufacturers who pay no tariffs. There is also a strong presence of U.S. industry in Italy—with more than 600 American subsidiaries, these manufacturing operations to some degree displace normal U.S. exports.

Another important consideration is the Italian Government's strong participation in industry. The fact that the government has an important say in many of the investment and procurement decisions affecting U.S. exports can and should be turned to our advantage by designing marketing efforts of U.S. products to insure coverage of important government procurement agencies. In the government sector alone, new investment in rail and airport facilities in 1974 is planned at above the half billion dollar level. Sizable outlays are being planned for port reconstruction at Palermo (which was recently hit by a severe storm) and port expansion at Genoa. These projects offer opportunities for sophisticated U.S. equipment which cannot presently be procured in Italy, in advanced avionics, electronic and telecommunications for railroads, for large port dredges, and landing and navigational aids.

In the private sector, long-term investment prospects requiring sizable imported inputs are good, particularly in chemicals and construction. Reduced investment activities are expected, however, in the automotive and metallurgical fields over the next several years, due in most part to present excessive capacity. The growth of new industries in



TRACKED AIR CUSHION VEHICLE—*Former U.S. Secretary of Transportation and now Ambassador to Italy John A. Volpe emerges from an "Air-train" designed by a research team at Palermo University. After building theoretical studies on small-scale models, the team constructed first a large working model and later this half-sized prototype vehicle called IAP3 (Istituto Aeronautica Palermo number 3). Discussions are under way with the U.S. Department of Transportation for a joint program of research activity in the area of better and faster transportation systems.*

the south of Italy, the Mezzogiorno, is expected to pick up considerably as the Italian Government channels more infrastructure resources to that area; indeed, according to one private source, in both production and employment terms the growth of industry in the south should be greater between 1973 and 1976 than that of industry in the total of the nation's dynamic central northern regions.

The major promotional vehicle of the United States Government in Italy, the U.S. Trade Center in Milan, has programmed many attractive shows for 1974 that relate directly and dynamically to the needs of the present Italian economic situation.

Scheduled shows include Electronic Production and Test Equipment (March), Data and Telecommunications Equipment (May), and Biomedical Equipment (June).

More information on these shows can be obtained from the U.S. Department of Commerce or by writing to the U.S. Trade Center, Via Gattamelata 5, 20149, Milano, Italy.

The Embassy, working with the Consulates and Consulates General, has identified a series of target industries in which the potential for U.S. export and trade promotion is very high and merits special attention by U.S. industry. These include the following:

► Electronic Data Processing Equipment: Short and medium-term market forecasts predict increases of over 20 percent per year in equipment sales with a six-fold increase in computer installations alone to 20,000 units by 1980.

► Chemicals: This industry is undergoing a period of marked expansion. During the 1973-1980 period it is expected to spend some $10 billion in plant investment, although the petroleum embargo may hit this industry, especially in the short-term, very hard.

► Electronics: U.S. origin components are becoming more competitive against third country suppliers and an expanding market can be expected in this sector.

► Medical Equipment: The hospital reform program is in the forefront of government reform objectives. Annual consumption of hospital equipment is expected to increase to $20 million in the 1973-1974 period.

► Industrial Process Controls and Measuring Equipment: The United States is a major supplier in this sector with a market of roughly $40 million a year. The Embassy believes a 10 percent increase in U.S. exports is possible.

► Environmental Control Equipment: As in the United States, heightened attention is being given to ecology, evidenced by major expositions which will be held in Italy during 1974 featuring air environmental control, and monitoring and testing equipment. Systems for prevention of water and air pollution and solid waste treatment processes are in increased demand.

Market studies on all of the above are available in the Department of Commerce and its district offices. In addition, promotional programs are being considered or planned for 1974-1975 in the Milan Trade Center, or other promotional U.S. Government techniques (such as Trade Missions) in the following fields, all of which appear to offer very good potential for U.S. exporters: analytical and testing equipment in pharmaceuticals and cosmetics manufacture, process control instrumentation, power source equipment including gas turbine generating equipment and certain sizes of diesel engines, recreation and leisure products, sophisticated, numerically controlled machine tools and accessories, industrial maintenance and safety equipment, and dental equipment and supplies.

Israeli Economy Steadies Following Costly Conflict

Following the costliest war in Israel's history, which involved wrenching economic dislocations, the economic situation of the country is gradually stabilizing.

Reporting from the U.S. Embassy in Tel Aviv, Lee Collins, Commercial Attache, and James Matter, Economic/Commercial Officer, state that the war revealed certain deficiencies which will receive priority attention during the current year as a matter of high national policy. There will be major trade opportunities for American businessmen, but timely response and initiative will be decisive factors in capitalizing on them. U.S. firms must be alert to the opportunities resulting from the war; special attention should be given to faster delivery(as the country will need goods quickly), which may well decide the fate of an order.

As a result of the war and related financial measures, it is expected that purchases of consumer goods will decline in 1974. However, this will be offset by a rise in purchases of capital goods for industrial expansion, and it is likely that the latter effect will be the stronger.

The severe inflationary pressures which the economy has experienced over the last few years will undoubtedly continue. During 1973 inflation exceeded 20 percent, and it can hardly be expected to abate in 1974.

A large proportion of inflationary pressure is, and will continue to be, attributable to investments which the government believes must go forward. These investments will necessarily involve a substantial level of imports. The prospects in a number of fields are strong enough to warrant serious consideration, even by firms not presently in this market.

Manpower shortages in recent years have been acute, and many Arab workers from the occupied territories were attracted into the labor market. As a result of the war and attendant mobilization the shortage has worsened, and it is likely to continue to be serious well into the future. Consequently, labor-saving devices — especially those which do not require great sophistication to operate—will be in demand. There is considerable scope for intelligent and well-targeted salesmanship in this area.

Intensified demand

Demand for American technology and traditionally high quality goods has if anything been intensified by the war. Israelis respect American products and recognize that foreign currency realignments have narrowed cost disadvantages. But the American share of the Israeli market has nevertheless been declining. Faster delivery times, more effective representation, greater interest in this rapidly growing market, and good servicing of equipment once delivered will be required if this trend is to be reversed. Many American businesses have been deficient in one or more of these areas in the past.

Immediate and promising export opportunities exist in the following areas:

► Capital goods for defense industries, such as metal-working and machine tools — these industries will be expanding this year;

► Electronics equipment and components of almost every variety, mainly for industrial customers;

► Materials handling equipment: for the ports where perennial shortages of manpower provide a stimulus to invest which the war has only intensified; for industry, which by and large is undercapitalized in this area, and which also suffers manpower shortages; and earthmoving equipment.

► Chemicals, pharmaceuticals, pesticides and fertilizers are high on the projected investment list. Investment plans were estimated before October at approximately $50 million per year for the next three years.

► Food packaging, processing, and preserving machinery is needed to bolster the intensive export program of citrus products and other agricultural products of which Israel produces a surplus. An international Packaging and Food Processing Equipment Exhibition called ISPAK will be held May 6-9 in Tel Aviv. U.S. firms will do well to support their agents' participation in this show or participate in a U.S. Department of Commerce-sponsored trade mission which will be held in Israel at the same time and then go on to Turkey.

► Sophisticated medical instruments and hospital equipment will be acquired. Modern rehabilitation equipment is in particular demand.

► Instrumentation in general is another area in which great demand exists. This field is complementary to almost all the abovementioned categories.

Major exhibition

Technology '73, the biennial Tel Aviv International Trade Fair which was to have taken place Oct. 23-31, 1973 was rescheduled for Feb. 5-13. The United States participated in the Fair with a major exhibition of instrumentation, power generating, materials handling, and plant maintenance equipment.

Israel expects to import over $3 billion in goods and services in the current year, a large amount for a nation of only 3.2 million people.

The tourism industry has naturally been adversely affected by the war, leaving many hotels virtually empty. A slight upturn is now evident, but tourism is not expected to return to full capacity until spring.

Immigration as well as normal population growth will continue to place heavy demands on the construction industry. Many construction workers have been mobilized, worsening prospects to alleviate the already chronic labor shortage. New building processes and techniques, modular houses, prefab housing and prefab sections, which would speed up construction would find a highly receptive market.

Transport became a serious problem due to the conscription of heavy duty trucks and busses by the armed forces immediately upon outbreak of the war. It is expected that recent purchases of 2,500 new heavy-duty trucks and the gradual release of some trucks by the armed forces to the civilian sector will help alleviate the transportation problem. Unfortunately, American truck manufacturers were able to supply only a few hundred of the 2,500 bought on short notice.

Busses also have a substantial market; Israel buys over 1,000 busses annually, and this number is expected to continue over coming years.

To relieve pressure on roads an expansion of the rail network is expected. This will involve additional rolling stock, especially bulk freight carriers, rails, and other related equipment.

Due to continued mobilization of reservists, the Israeli economy is suffering from a manpower shortage of approximately 20 percent. Some of this shortage, however, has been compensated for by the wartime motivation of workers.

Summing up, Israel has ample financial resources available to pay for its purchases which, due to the recent war, will cover a wide range of equipment and raw materials. The United States has become an even more attractive source of supply because of dollar realignment and present popular sentiment.

U.S. Hopes For Gains In Denmark Hinge On Extent Of Energy Crisis

The strong expansionary pressures on the Danish economy during the past year are being dampened in 1974. The extent of the anticipated slowdown will depend upon the duration and severity of the current energy crisis and the associated government austerity program, according to the U.S. Embassy in Copenhagen.

American exporters did not draw their full share of benefits from the rising Danish demand in 1973 and therefore have good prospects of improving their position in the Danish market this year, particularly in industrial equipment, provided that the oil supply crisis is not aggravated to the point of drastically reducing Danish economic activity.

Economic indicators

The overall growth rate of the economy in 1973 fell only slightly short of the European Community average of 6 percent but this figure may be halved in 1974. Consumer spending should show unchanged expansion at about 4 percent but public outlays will probably grow at a much slower rate than in preceding years. Private investment skyrocketed in 1973 with a real growth rate of 13 percent as recovery of business investment coincided with a continuing home building boom; it should revert to a more moderate pace in 1974.

Exports were paced by sharply increased revenues from agricultural products as Danish farmers benefitted from the initial results of EEC membership. These windfalls will not be repeated in 1974 but, on the other hand, imports are expected to show a much more moderate growth than in 1973. Nonetheless, any net trade balance gains achieved will probably be absorbed by adverse price developments (particularly in oil) so that further deterioration of the balance of payments is likely to occur. The higher cost of imports and a continuing domestic cost push should keep Denmark in the lead in the European inflation race with a rate of 10 percent or more.

Business investment expanded 20 to 25 percent in 1973 and is expected to rise further in 1974, though at a more moderate pace. Danish membership in the enlarged European Community offers favorable marketing prospects for Danish goods. As a result, Danish industries are again strengthening production capacity after several years of relative standstill. This development in turn offers good opportunities for American exporters of investment goods.

Although the present oil supply crisis makes forecasting uncertain, it is generally not expected that oil shortages will seriously threaten the economy, but may well cause less lively growth than would otherwise have been the case. Credit allocations and government economic policy in general will continue to encourage industrial expansion.

U.S. suppliers keep pace

Taking the statistical effects of the dollar depreciation into account, Danish trade figures for 1973 seem to indicate that imports from the United States have kept pace with the overall rise in imports of industrial goods. There are variations from one commodity group to another, however.

Imports of U.S.-manufactured non-electric industrial equipment registered only minor increases in 1973, mainly because of relatively low figures for earthmoving equipment, aircraft engines, farm implements, and machine tools. In these areas, American exports have apparently been hampered, in some instances by uncertain trends, in others by alternate supplies (frequently U.S. overseas subsidiaries).

Electronic data processing equipment of American origin stagnated, probably due to substitution from these subsidiaries. American exporters, on the other hand, are taking their full share of a growing market for transportation and electrical equipment.

The sale in 1973 of one U.S.-made oil-drilling platform for the Danish North Sea exploration project counted heavily in the trade statistics. This venture is likely to require continued American equipment supplies for several years.

Although the Danish home construction industry will become less buoyant in 1974, activity remains high and demand for building materials is heavy. American wood products, predominantly plywood, doubled their sales in the Danish market in 1973 and still enjoy very favorable prospects. Shortages of labor and high wage costs favor continuing progress of standardized, labor-saving construction. For example, plywood is widely used for both interior and exterior construction. Still, a repetition of the 1973 record cannot be expected in 1974.

American textiles lost ground in the Danish market in 1973. With the present European shortages, however, particularly of man-made fibers, possibilities of regaining markets exist for any American exporter able to deliver.

American brands of leisure wear continue to dominate the Danish market. Most of this apparel, particularly the popular jeans and jackets, is manufactured in European subsidiaries of the parent firm.

High quality and high fashion U.S.-made men's dress shirts continue their slow penetration of the market through selected quality department stores. American-made bath accessories, particularly quality towels, enjoy excellent acceptance.

American products are getting a growing share of an expanding Danish market for various chemical materials. The United States remains the major supplier of ammonia to Danish farmers, who have a growing demand for fertilizers.

In short supply

Several chemical products are, on the other hand, in extremely short supply due to the present oil crisis.

This is particularly the case in the field of plastic raw materials. Prices for polyethylene, for instance, have doubled in the past few months with manufacturers bidding against each other for the limited supplies. Even though American suppliers are better off than their European competitors, they are not aiming at expanding their market share but hope only to maintain deliveries and be able to provide for their principal customers.

American pharmaceuticals registered a 23 percent increase in sales in Denmark in 1973, and have continuing good prospects. Antibiotics sell particularly well, and the United States is now the main supplier to the Danish market.

With shrimp the leading product in American fish exports to Denmark, accounting for about 70 percent of total exports, sales of American fish products to Denmark more than doubled in 1973. U.S. suppliers are gaining a growing share of their specialty market and prospects for continued progress should remain good even if consumer spending is dampened.

U.S. sales to Denmark of grain and other feedstuffs registered a handsome gain in 1973 but this was due entirely to price increases. By quantity, imports were about unchanged from the preceding year. Expected expansion of Danish livestock production points toward steady markets for fodders.

Several factors affect the market for soybeans, which the United States holds almost 100 percent. While demand probably will increase, the oil supply crisis may affect the Danish crushing plants' ability to utilize their full capacity. The plants had feared a 25 percent cut in fuel supplies but now hope to limit the cut to about 10 percent and to maintain their normal production levels. While American exports of soybeans to Denmark showed a 20 percent downward drift in 1973, they are expected to fully recover in 1974.

Stock building

As expected, stock building in 1973 in anticipation of tariff increases led to a 30 percent rise in American exports of raw tobacco to Denmark. On Jan. 1, Denmark made a 40 percent approach toward the EEC common external tariff which means that previously duty-free imports of tobacco will now be charged from 6 to 9 percent duty. While this is not expected to hamper 1974 exports to Denmark much, the outlook for the longer term is less bright, because of EEC preferential arrangements with African tobacco supplying countries.

Sudan Government Has Funds To Pursue Development Goals

A $200 million credit guarantee from Saudi Arabia has given the Sudan Government new impetus to pursue development goals. With Sudan no longer facing a credit squeeze, those U.S. suppliers whose interests coincide with Sudanese priority objectives in both the public and private sectors will find major opportunities.

As suppliers who have been doing business recently in Sudan are well aware, the Sudanese have high regard for U.S. technology and expertise and have been actively seeking U.S. imports. The country's expanding textile and sugar industries, transportation (including equipment and construction), communications, and agricultural enterprises are target areas for U.S. exporters.

Rising Hong Kong Indices Mask Problems, Concerns

The Hong Kong economy is performing very respectably.

Despite seemingly encouraging trade and GNP figures, however, local industrialists and traders are showing signs of gloom and their catalogue of concerns is long. As is typical of an economy dependent upon foreign trade, most of the worries are external.

Starting from a near-zero base, Hong Kong's domestic exports soared during the 1950's and 1960's, according to the American Consulate General. Refugees from Mainland China provided a large pool of cheap labor, and political instability in the Far East induced a large inflow of capital. The phenomenal increase in exports was made possible by the climate of relative free trade during the period. Many now fear that the era of free trade may be drawing to a close and that in a world of trading blocs, Hong Kong may suffer adversely.

EEC preferences

When the United Kingdom negotiated its entry into the EEC, it agreed not to seek associated status for Hong Kong; in return, the EEC agreed to extend the benefits of its Generalized Scheme of Preference (GSP) to Hong Kong. The benefits of the Community's GSP have been rather limited although most observers agree that Hong Kong has been quicker than its competitors to take advantage of them (about $80 million in 1972 exports were covered). In January the United Kingdom implemented the EEC scheme, which denies preference for Hong Kong's textiles and footwear while according them to Hong Kong's competitors.

Too, the devalued U.S. dollar has made Hong Kong products more expensive in the United States. The volume of some exports, particularly garments, has fallen. Hong Kong's principal competitors for the U.S. market—Taiwan and South Korea—enjoy lower labor costs and a cheaper currency, providing good grounds for local fears.

In addition to future or hypothetical problems, manufacturers are faced with the very present difficulties of obtaining raw materials in short supply and keeping down costs in the face of rampant inflation. The failure of a new product to emerge and fill the expansionary role played by electronics and wigs in the late 1960's has frustrated the Colony's entrepreneurial instincts.

Domestic exports for the first half of 1973 totalled $1.6 billion. In Hong Kong dollars, this is an increase of 17 percent over the comparable period of 1972 (in U.S. dollars the increase is some 26 percent). Such rates are reminiscent of the heady expansion of the late 60's, yet there is persistent grousing about these figures. The most common complaint is that prices have risen so much they have been responsible for all the apparent growth.

Hong Kong's principal suppliers have continued to be Japan, China, and the United States. While the U.S. share has remained at about 12 percent, Japan's share has fallen from 23 to 21 percent, and China's has risen from 18 to 19 percent. The declining Japanese share reflects price rises resulting from the dearer Yen and falling exports of fabrics. China's increases were principally in clothing and textiles, and cereals.

Tourists flock in

In the first half of 1973, 620,000 tourists arrived in Hong Kong, some 18 percent more than in the same period of 1972. This represents a marginal decline in growth (19 percent in 1972), but the industry expects arrivals to total 1.3 million by the end of the year.

Hotel accommodation has increased by 1,000 rooms in the past 12 months, yet occupancy has fallen only slightly, to 77 percent. An additional 5,000 rooms will be added to the Colony's capacity by the end of 1975.

Inflation hits hard

Hong Kong is currently undergoing its severest bout of inflation since World War II. Although inflation is a world-wide phenomenon, it is hitting Hong Kong harder than either Western Europe or North America. Between August 1964 and August 1972 the General Consumer Price Index (GCPI) increased by an average annual rate of 3.5 percent. The increase between August 1972 and August 1973 was 23.8 percent, almost all of which occurred in 1973. Food prices during this period rose by 35 percent, a figure which might elicit pity from even the hard-

NEW PRODUCT IS NEEDED—*Production of transistor radios and other more sophisticated electronics products kept Hong Kong booming through the 1960's.*

pressed American housewife.

The GCPI is based upon the expenditure pattern of an average middle income Chinese family and, thus, does not reflect the costs of an expatriate family, nor does it indicate the costs of doing business. These latter costs have soared, owing to steep rises in raw material prices and spiralling rents for commercial premises.

There are no published balance of payments figures and exchange reserve figures are announced only occasionally by the Hong Kong Government. Nevertheless, it is clear from banking statistics and numerous comments in business circles that exchange reserves probably fell about $300-400 million in 1973. The relatively small size of the trade deficit and the continued growth in tourist earnings indicate that the cause is mainly an outflow of capital and to a much lesser extent exchange losses caused by the depreciation of sterling and U.S. dollars vis-a-vis the Hong Kong dollar.

The movement seems to be connected with the end of the stock market boom and is, in effect, a reversal of the inflow of funds into Hong Kong in 1972 for securities investment that reached its peak in January of last year.

Healthy sales rise

U.S. exports to Hong Kong rose by a healthy 24 percent in the first eight months of last year. Imports from all sources, however, rose by 22 percent and the U.S. share of the market changed almost imperceptibly from 11.9 to 12.3 percent. This performance is disappointing in view of the increased competitiveness of U.S. goods after two devaluations. The answer seems to lie in U.S. shortages and a lack of aggressive marketing by many U.S. firms rather than any lack of Hong Kong demand.

Examples of this phenomenon are found in textile machinery, plastic raw materials, and textile fibers, sales of which increased in 1973, but not enough to meet demand. U.S. manufacturers of these items have been forced to ration deliveries and give primary consideration to long-standing customers.

Raw cotton sales, after declining in 1972, soared in 1973. Embargoes imposed by Pakistan and Brazil and chronically late deliveries from East Africa have made U.S. cotton more attractive, even at high prices; Hong Kong bought some 300,000 bales in 1973.

There is considerable interest in U.S. fabrics, owing to short local supplies and the price effect of U.S. devaluation.

Fruit and vegetables, electronic machinery and components, diamonds, and scientific equipment all registered notable gains in 1973.

High volume of sales

Air conditioners have also continued a high volume of sales. The market for processed foods continues to expand and capital equipment will do well in view of attractive current U.S. prices. The construction boom and the plans for more hotels offer opportunities for construction supplies and equipment, hotel supplies, and materials handling equipment.

The market for U.S. consumer goods should expand with rising incomes. The October American Fortnight gave new impetus to this market sector.

The Hong Kong Government's extensive public works programs provide opportunities for the export of services, particularly engineering and design services. Portions of the mass transit system will probably be outside the competence of the consortium that eventually lands the construction contract, leaving an opening for U.S. systems engineers.

In the private sector, it appears likely that an oil refinery will be constructed in the Colony within the next few years. Less certain but also possible is a petrochemical plant to provide a secure supply of man-made fibers to the local textile industry.

The Hong Kong Government is actively seeking foreign investment in the medium and high technology range. It is not a question of needing the money, but of looking for processes and managerial know-how.

Hong Kong's traditional light manufacturers hold small promise for extensive expansion and many are concentrating expansion plans on other, lower cost, countries in the area.

Modified land policy

Realizing that a new generation of more sophisticated manufacturing processes is essential to continued dynamic growth, the government is modifying its industrial land policy. Certain lots of Crown Land are being put on the auction block subject to stringent requirements for land-intensive industrial and engineering activities.

The first test of this policy occurred in April 1973, when the Outboard Marine Co., of Illinois, successfully bid for a five-acre site on Tsing Yi Island for plant construction. It is anticipated that similar arrangements will be completed for other foreign investors in coming months.

With over 500 firms and an estimated total investment approaching $500 million, the United States has the largest bloc of foreign investment in the Colony. Most U.S. firms are regional sales and/or administrative headquarters, but over 100 are engaged in manufacturing. The influx of new United States companies slowed down in 1972 and 1973.

The combination of soaring local costs and the fanfare surrounding investment incentives in the Philippines has led to persistent rumors that U.S. firms would move out in large numbers. This has not come to pass—in fact a few additional U.S. companies moved into Hong Kong in 1973—arguing that Hong Kong's many business attractions (low taxation, minimal government interference, good communications, etc.) are still economically valid.

Spain's Plentiful Monetary Reserves Will Help It Surmount Oil Woes

Spain had a good economic year in 1973 with real GNP growth up 7.9 percent, according to the U.S. Embassy in Madrid, but the pace has begun to slow.

The peseta was strong last year and international reserves rose by nearly $2 billion. This outstanding performance was somewhat tarnished by inflation, which rose at the highest rate in 26 years. Production and employment were at near capacity levels.

Then came the petroleum crisis and with it serious economic problems projected for Spain in 1974. Estimates of projected GNP growth have been revised downward to approximately 4 percent. Accompanying this will be an even higher inflationary rate than in 1973.

Nevertheless, Spain's immense international monetary reserves will permit it to weather the economic storm created by the petroleum price rises much more readily than most countries. The near $7 billion reserves will perhaps drop to about $5 billion by the end of this year. In addition to the big increase in oil import costs this will be the result of a dropoff in the tourist business as well as emigrant remittances that will undoubtedly follow production cutbacks in the rest of Europe.

The Government of Spain seems to be conscious of the problems that would result from too abruptly cooling down the inflating economy and has placed top priority on maintaining the production levels as high as possible. Expansionary steps may therefore be anticipated in the drive to keep GNP growth up even though at the expense of adding to inflationary pressures.

The peseta was floated in January, responding in large part to the gradual revaluation of the peseta vis-a-vis its European trading partners. A 3.5 percent depreciation of the peseta with respect to the dollar came almost simultaneously.

Spain imported approximately $1.5 billion in goods from the United States during 1973, a 45 percent increase over the previous year. The U.S. share of the Spanish market grew gradually through the course of the year, peaking out in June at 19 percent. From that point on it declined somewhat to finish the year at a 15.9 percent share. This is approximately the same as 1972 and represents, more or less, the long-term historical position of the United States in the Spanish market.

Troubling trend

Rather troubling, however, is the steady month-by-month downward trend for the U.S. share during the second half. This could be a reflection of the wearing off of the effects of the dollar devaluations; it could also reflect the cutback in soybean and soybean meal shipments from the United States to the Spanish market during the same period of time.

Spanish import demand for nonpetroleum products is projected to increase only 7 percent over the course of 1974. Taking this into account and assuming that the U.S. market share will remain constant through the course of the year at 15.9 percent means that U.S. exports to Spain will increase by only about $100 million in 1974 to a level of $1.6 billion. Of course, there is little the United States can do to counter this trend since it will be due largely to the exogenous forces of the business cycle and the petroleum price crisis.

As of the end of November the Export-Import Bank had loans outstanding to customers in Spain amounting to $422 million. This represents an increase of $103 million over the same total one year earlier. Another $544 million has been authorized but as yet undisbursed. Adding the outstanding and undisbursed balances brings the total exposure up to $965 million. This makes Spain one of the largest Export-Import Bank customers in the world.

In the course of 1973 ExIm financing assisted in the sale of $233 million worth of nuclear power plant equipment and $184 million of commercial jet aircraft. The Bank also was supporting the sale of $55 million worth of equipment to the Sagunto Steel Mill plant with a $25 million loan.

All the business, however, was not only in the multimillion dollar class since the recently inaugurated Cooperative Financing Facility also began functioning in Spain with the granting of several smaller loans for which this program was developed. Nearly ten local banks signed up for lines of credit under the CFF program during the course of 1973.

There have been a few changes in regulations and government organization concerning foreign investment. The requirement that direct foreign investment which exceeds 50 percent of the equity of the enterprise receive administrative authorization from the government has been reinstituted; this requirement had been waived in certain sectors in order to encourage investment.

Another change, of an organizational nature, is that the Spanish Government office processing authorizations has been transferred from the Presidency to the Ministry of Commerce where the new General Directorate of International Transactions has been established for this purpose. As part of this reorganization the Instituto Español de Moneda Extranjera (IEME) which handled the authorization relating to certain of the financial and monetary transfer aspects involved in foreign investment has been dissolved. Part of its functions have been transferred to the newly-created Directorate General for International Trans-

VISITING THE U.S. DISPLAY—*Prince Juan Carlos of Spain (center) visits the 13th International Trade Exhibition in Madrid. With the Prince are L. A. Petit Herrera (left), President of the show, and W. R. Vitous, Director of the U.S. exhibit.*

actions in the Ministry of Commerce and the balance to the Bank of Spain's Foreign Department.

There has been much talk of new investment regulations being issued by the Spanish Government, but none have so far appeared. The word is that there will be an attempt to unify all the pertinent decrees and regulations governing foreign investment into one code for simplicity and ease of administration.

There have been no indications that there will be a major change in the philosophy of the Spanish Government's approach to foreign investment. However, there will probably be an updating of the government control mechanism so as to bring it in line with the current economic situation. Spain is no longer an underdeveloped, capital-short country. An increased degree of discrimination in the issuance of authorizations should therefore be anticipated. Sectors which are relatively saturated by foreign investment may find greater difficulty than those where there has been relatively little foreign penetration.

However, where the foreign firm investing in Spain brings with it technology, adds to the capital formation rather than simply substituting foreign for Spanish investment in an existing firm (as in a takeover), or initiates a manufacturing operation that is of an import-substitution nature, or is oriented toward exports, it will most likely not only find no impediment, but rather will be encouraged. Furthermore, it is obvious that certain sectors of the economy and geographic regions are capital deficient. Therefore, it would only be rational and natural that the government would also encourage foreign investors along the lines of these national necessities.

Key policy element

A very key element in Spain's international economic policy, its preferential trade agreement with the European Economic Community, is still in a state of suspended animation. The existing agreement which was signed in 1970 with the original six members of the EEC became outdated when the Community expanded its membership to nine one year ago. Despite the hope that over the course of 1973 a new agreement, or at least an adjustment to the existing 1970 accord, could be negotiated, such was not the case. In the current curious legal circumstances the three new members are aligning their tariff structure with the EEC's "common external tariff" but are largely leaving things "standstill" in relation to trade with Spain. While this benefits Spain's agricultural exports to these nations, it is not a satisfactory long-range solution. The revised goal is to complete negotiations on the new preferential agreement by June.

Clear from the negotiations so far is that protectionist influences within the Community are reluctant to provide Spain what it seeks in terms of agricultural concessions. Agreement on industrial goods was, however, much closer with a virtually full-coverage zero-level tariff on these to be reached in stages by 1984 according to Spain's most recent negotiating position (which was conditional to the EEC ceding more on the agricultural products side). A more nearly "GATTable" agreement seems to be the likely product of this effort.

By the terms of the current Agreement Spain provides preferential tariff treatment to its imports from the Community. In 1972 this Agreement provided for a 10 percent lowering of Spain's tariffs on a specified list of goods that enter from the EEC Six, an advantage not enjoyed by U.S. exporters to the Spanish market. Some estimates set the loss of sales by U.S. exporters as a result of this at up to $20 million for the year, 2 percent of actual sales.

In subsequent years, by the terms of the existing Agreement, the tariff cuts and competitive advantage become gradually greater until a 60 percent cut is reached. As indicated above, the probable new Agreement would eventually provide for a 100 percent cut on an even wider list of goods. The effect on U.S. exports would therefore seem to be growing ever more discriminatory and damaging with the passage of time.

World Trade Actions

Exporters To West Europe Find New Tariff Situation

United States exporters to Western European markets are finding that enlargement of the European Economic Community and trade agreements of non-members with the EEC are resulting in tariff changes on industrial goods, according to the Bureau of International Commerce's European Regional Affairs and Trade Regulations Staff.

Producers located within what will eventually amount to a 16-member free trade area now enjoy lower tariffs within the area. Exports from the United States to 13 of these countries will continue to face the same duties; the exceptions are the tariffs of the three new members of the EEC — the United Kingdom, Denmark, and Ireland.

Changes can be crucial

Although average tariff levels in Europe are relatively low, largely as a result of postwar trade liberalization under the General Agreement on Tariffs and Trade (GATT), tariff changes on many price sensitive products can still be crucial. The following brief description of the pattern of changes is intended to clarify the present situation.

On Jan. 1 of this year, the United Kingdom, Denmark and Ireland—new members of the EEC as of Jan. 1, 1973—made the first move in aligning their national tariffs on industrial goods to the EEC's Common External Tariff (CXT). The process of alignment involves a step-by-step elimination of the difference between the tariff rates of the new members and those of the CXT. If the former rate is lower, it must be increased; if higher, it will be reduced.

This first move represents 40 percent of the alignment; there will be additional 20 percent moves on Jan. 1, 1975, Jan. 1, 1976, and July 1 1977, when final alignment will be reached. For example, the 14 percent U.K. duty rate and the Danish and Irish duty-free rates on automatic data processing machines falling under Brussels Tariff Nomenclature (BTN) heading 84.53 began moving to the EEC's CXT rate of 7 percent. This means that on Jan. 1 the U.K. rate was decreased to 11.2 percent while the Danish and Irish rates were increased to 2.8 percent. Additional moves on the dates cited above will bring the U.K. rate to 9.8, 8.4 and 7 percent, and the Danish and Irish rates to 4.2, 5.6 and 7 percent. An example of a U.K. rate that will increase is the rate for agricultural tractors under BTN 87.01—from 7.5 to 18 percent. This rate was increased to 11.7 percent on Jan. 1; the additional moves will bring it to 13.8, 15.9 and 18 percent.

The foregoing does not pertain in cases where the difference between the U.K., Danish, or Irish rate and the EEC's CXT rate is slight, that is, when the difference does not exceed 15 percent of the CXT rate. In these cases the move to the CXT rate was made in a single step on Jan. 1; for example, the increase in the U.K. rate on cash registers falling under BTN 84.52 from 5 to 5.5 percent. The EEC's CXT rates also became effective in one step on Jan. 1 for European Atomic Energy Community (EURATOM) items regardless of the difference in rates.

It should be emphasized that although 16 Western European countries made tariff rate revisions on Jan. 1, *only* the United Kingdom, Denmark, and Ireland made changes which apply to U.S. exports. The other changes, discussed below, apply to trade among the 16 countries themselves.

The original six members of the EEC (Belgium, France, Germany, Italy, Luxembourg, and the Netherlands) and the three new members (United Kingdom, Denmark and Ireland) began a progressive elimination of duties on imports of industrial goods from each other on April 1, 1973, when a 20 percent cut was made. Another 20 percent cut became effective Jan. 1 of this year, resulting in a cumulative reduction of 40 percent. For example, imports of ADP machines into the Six from the United Kingdom, Denmark, and Ireland are now subject to a rate of 4.2 percent (7 percent reduced by 40 percent); additional 20 percent cuts will be made on Jan. 1, 1975, Jan. 1, 1976, and July 1, 1977 to 2.8 percent, 1.4 percent, and zero, respectively. Similarly, imports into the United Kingdom from the Six are now subject to a rate of 8.4 percent (14 percent reduced by 40 percent); this rate will be reduced on the above dates to 5.6 percent, 2.8 percent, and zero.

New EEC members

Imports into the United Kingdom from Denmark and Ireland, as well as imports into Denmark and Ireland from the United Kingdom, will be subject to existing preferential treatment (mostly duty-free) during the transitional period. This preferential treatment is the result of past U.K. and Danish membership in the European Free Trade Association (EFTA) and the Anglo-Irish Free Trade Agreement. Duties on trade between Denmark and Ireland are to be eliminated according to the basic timetable.

The EEC and the seven present EFTA countries—Austria, Finland, Iceland, Norway, Portugal, Sweden and Switzerland—have entered into broadly similar preferential trade agreements, all of which generally provide for duty-free trade in industrial goods by 1977.

Each agreement, however, has longer transition periods for sensitive products, such as certain steel products, aluminum, and paper. Moreover, the transition period for Portugal and Iceland has been extended.

As of Jan. 1, tariffs on the great majority of items traded between the EEC of Six and the EFTA countries have been reduced by 40 percent; additional 20 percent cuts to tariff elimination are scheduled for Jan. 1, 1975, Jan. 1, 1976, and July 1, 1977. Duty-free trade, with a few exceptions, among the seven EFTA nations and the United Kingdom and Denmark (former EFTA members) will be maintained. Tariffs on trade between Ireland and the EFTA countries will be eliminated according to the schedule outlined above.

In summary, duty rates on imports into the original six EEC countries from the United States remain unchanged, while those on imports into the United Kingdom, Denmark, and Ireland will, in most cases, be changing over the next several years as they are aligned to the EEC's CXT; the different duty rates levied on U.S. exports by the seven EFTA nations will also not change (EFTA, unlike the EEC, is not a customs union and, therefore, has no common external tariff); and on July 1, 1977, trade in the vast majority of industrial products among the 16 countries making up the EEC and EFTA will be duty-free.

Mediterranean preferences

Much of the trade in industrial goods between the EEC and most Mediterranean countries receives preferential treatment as a result of various bilateral agreements. The pioneer agreements were those that accorded Greece and Turkey the status of associate EEC membership. Subsequently, the following countries have either concluded preferential trade agreements or have associate status: Spain, Israel, Egypt, Lebanon, Malta, Cyprus, Morocco and Tunisia. The three new EEC members are obligated to adopt these agreements and to grant these Mediterranean countries the same tariff treatment as the latter receive from the Six. To date, however, negotiations on the details of meeting this obligation have not been concluded.

For more information

Information regarding Western European country duty rates applicable to specific industrial products may be obtained from the European Regional Affairs and Trade Regulations Staff, Office of International Marketing, U.S. Department of Commerce, Washington, D. C. 20230, telephone 202-967-2337. Inquiries should contain a complete product description, including BTN, SITC, or U.S. Schedule B Export Commodity numbers, if known, and names of particular countries of interest.

Romanians Request Films Of U.S. Industrial Items

The American Embassy in Bucharest (Economic Section) has received numerous requests from Romanian Ministries concerned with the industrial sector for films to be shown to audiences of engineers, purchasers, and technicians in order to familiarize Romanian industry with American firms.

Technical films would arouse the greatest interest on the Romanian side and thus be more useful for purposes of trade promotion than hard-sell commercial films. Films of institutional advertising type would also be useful in acquainting Romanian industry with major American firms. Films covering machine tools, electronic, petroleum and petrochemicals, and building and housing are particularly welcome.

Contact Paul M. Terlizzi of the Commerce Department's Bureau of East-West Trade at 202-967-5164.

Bangladesh Issues Latest Import Policy

Bangladesh's Commerce Minister has announced the January-June Import Policy, which basically follows the outlines of previous policies. Foreign exchange allocations for industrial and commercial imports excluding food total $404 million, which is the largest allocation for any shipping period. This will not result in a significantly higher level of imports, however, since more than $75 million is accounted for by rising world prices. In addition, the actual level of imports will depend upon the ability to overcome bottlenecks in the import system and the level of foreign aid.

Of the total allocation, products valued at $321 million will be imported by the public sector and $83 million by private interests. Public sector corporations will now be able to import their requirements directly, rather than through the Trading Corp. of Bangladesh (TCB) or the Chief Controller of Exports and Imports. The TCB's role has been somewhat reduced by shifting to other public organizations the import of goods involving extensive product knowledge and detailed negotiations.

Under this new policy, $30 million is allocated for industrial imports (equipment, raw materials, components, spares), and $103 million for commercial imports, mainly consumer items.

Major items to be imported during this shipping perioid are petroleum, oil, lubricants, raw cotton and synthetic fibres, cotton yarn and textiles, edible oil, cement and pharmaceuticals.

For specific information write to Near East-South Asia Division, BIC, U.S. Department of Commerce, Washington, D.C. 20230. All requests should include the Brussels Tariff Nomenclature, the U.N. Standard International Trade Classification, the U.S. Schedule B export commodity number, or a complete product description.

New Dominican Republic Law Amends Agency Regulations

New regulations governing agency-distributorship agreements are in force in the Dominican Republic, amending previous measures of 1966 and 1971.

Three main areas of change are noted. The first concerns granting further compensation to the agent when the representation is terminated after a contract duration exceeding five years. In addition to normal severance benefits, the representative is entitled to compensation amounting to 1/10 annual average gross profits for each year of representation in excess of five.

Another provision requires parties to an agency arrangement, before resorting to court action, to attempt to reach an amicable settlement through the services of the local chamber of commerce. The conciliatory procedure is described.

The third change imposes a restraint on foreign principals which expressly forbids any and all actions or operations intended to result or resulting in the termination, displacement or substitution of the agent, until an amicable settlement or a final agreement is reached between the parties and the agent's compensation has been paid in full.

It is set forth that foreign natural or legal persons may not engage in any capacity or status in the agency-distributorship business except after four years domicile in the Dominican Republic. Legal persons must be organized under the laws of the Dominican Republic and have paid-in capital representing local participation of at least 66 percent before any business activity will be authorized by the Secretary of Commerce, Agriculture and Industry, who is in charge of issuing permits.

A copy of Dominican Law No. 622, effective Dec. 29, 1973, governing agencies, including the new amendments, in unofficial translation is available upon request from Foreign Business Practices Division, Office of International Finance and Investment, International Economic Policy and Research, U.S. Department of Commerce, Washington, D.C. 20230.

Chilean Tariff Reform Aims At Reducing Protection Level

The Chilean Government has announced a three-year tariff reform designed to reduce Chile's level of protection. Trade restrictions such as prior import deposits and import quotas are to be eliminated.

Effective immediately, all ad valorem duties greater than 220 percent are reduced to 200 percent. In addition, ad valorem duties between 50 percent and 220 percent are reduced, in general, by 10 percent.

Prohibitions on the importation of certain luxury goods will continue for the present. However, the Government plans to remove these restrictions and replace them with consumption taxes.

Pakistan Amends Trade Rules With Additions To Free List

With immediate effect, the Government of Pakistan has amended the Import Policy Order effective to July 1, 1974 by adding the following to the Free List: sulphur, including refined sulphur in slabs and rolls; unmanufactured tobacco; woodpulp; safety equipment for mining industry; and magnetic tapes. Items on the Free List may be imported from world-wide sources or under loans, credits and barters from respective sources.

The Government also promulgated the Banks (Nationalization) Ordinance of 1974 effective Jan. 1, which nationalized all domestically-owned banks. Foreign banks were not affected. The ordinance states that only the Federal Government or a corporation wholly owned by the Government may establish a bank. The ordinance also provides for compensation to owners of nationalized banks.

Spain's Commerce Ministry Decrees Import Duty Cut

As part of the Spanish Government's efforts to control domestic inflation, the Ministry of Commerce has decreed an across-the-board duty reduction of five percent (e.g., a 10 percent rate would be reduced to 9.5 percent on all goods dutiable at rates exceeding 5 percent or not already reduced on the basis of two previous decrees—mostly textiles and petrochemicals). The decree became effective Jan. 19, and will remain in effect three months with the possibility of extension.

Additional details can be obtained from the European Regional Affairs and Trade Regulations Staff, Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C. 20230, (202 967-2337).

Guatemala Requires Papers On Food Product Shipments

A Guatemalan law passed last March requires original copies of sanitary certificates with each shipment of processed food products. Attempts are being made to amend this law because of problems it creates. Meanwhile, registration of the product in any Central American country except Honduras and Panama is recognized by the Departmento de Alimentos in Guatemala.

Tennessee Is Honor State For Valley Trade Meeting

Tennessee will be the honor state at the 29th annual Mississippi Valley World Trade Conference March 20-22 in New Orleans.

The announcement was made by Roger P. Richard, president of the World Trade Club of Greater New Orleans and a member of the executive committee of the Mississippi Valley World Trade Council, principal sponsor of the conference. He will be the general chairman for the 1974 conference.

International Business Reports

Germany in the Seventies. Published by Business International Corp. 140pp. $95.

This report, prepared by Business International's main European office in Geneva, covers such subjects as the socio-political climate, Germany's economic targets, the monetary situation and inflation, the labor situation and growth of "industrial democracy," Germany's foreign economic relations, corporate taxes, antitrust developments, the energy crisis, and consumer and environmental protection.

Write: Business International Corp., 1 Dag Hammarskjold Plaza, New York, N.Y. 10017.

Doing Business With China: American Trade Opportunities in the 1970s. Edited by William W. Whitson. 593pp. $25.

According to the editor, who is Director of China Studies at the Rand Corporation, this is a market survey of prospects for the sale of American products in more than 25 industry and trade categories to the People's Republic of China. Outlines steps designed to aid management in approaching trading with China at the least cost in money and executive time.

Write: Praeger Publishers, 111 Fourth Ave., New York, N.Y. 10003.

Directory of Maryland Exporters-Importers. 1973. 143pp. $4.

This is a listing of firms engaged in international trade in the state of Maryland. The firms have been classified by their trade products or services in accordance with the Standard Industrial Classification. Each product or service involved in international trade has been assigned a Standard Industrial Classification four-digit number.

The Directory is arranged in four main sections: Index to Products and Services, Exporters and Importers Listed by Products and Services, Exporters and Importers in Alphabetical Order, and Product and Service Code Titles.

Write: Maryland Division of Economic Development, William A. Pate, Director, 2525 Riva Rd., Annapolis, Md. 21401.

Survey of Mines, 48th edition. Published by the Financial Post, Toronto. 340pp. plus 31 pp. map section. $10.

Reviews operations of Canadian mining companies—earnings, dividends paid, ore reserves, exploration and development programs, financial status, etc. tabulates the price range of listed Canadian mining shares over a seven-year period and gives other significant data.

Write: The Financial Post, 481 University Ave., Toronto M5W 1A7.

International Banking and Finance. By Robert D. Fraser. 550pp. $19.50 with binder, $15 without.

This textbook and reference-type publication, intended for bankers, students and exporters, is in looseleaf form and according to the author will be updated with changing events and expanded to include new material. Some of the 18 chapters are: The Commercial Bank Institution and its International Activities; Commercial Bank Offices Abroad; Foreign Exchange; Foreign Money Deposits; International Transport and Storage of Goods; Financing International Trade; Documentary Credits; Acceptances; and Collections.

Write: R & H Publishing Services, Box 3532 Georgetown Post Office, Washington, D.C. 20007.

Calendar For World Traders

Feb. 19-20 — Ann Arbor, Mich. — Seminar on business prospects in Latin America, featuring Brazil and Mexico, Campus Inn Hotel. Sponsor: U. of Michigan's Institute for International Commerce, Commerce's Detroit District Office.

Feb. 20 —Fargo, N.D. — Eastern North Dakota Conference on International Trade, Town House Motel. Sponsors: Kansas City District Office and Small Business Admin.

Feb. 27-28 — Chicago — 37th Annual Chicago World Trade Conference, Palmer House. Sponsors: Chicago Assn. of Commerce and Industry, Int'l Trade Club of Chicago.

Feb. 28 — Atlanta — Export seminar, Atlanta District Office, 10 a.m.-noon.

March 6 — Memphis — Conference on Inland Waterways: Their Influence on Exporting and Reverse Investment, Travelodge (Airport).

March 11-15—Philadelphia—International Tool and Manufacturing Exposition and Engineering Conference.

March 12 — Louisville — Kentuckiana World Commerce Council meeting, Holiday Inn Brownsboro East.

March 19—Memphis—World Trade Club meeting, Southwestern University.

March 19 — New York — First of four weekly sessions featuring case study presentations by representatives of multinational corporations, developing countries and international organizations. Engineers Club, 6:15 p.m. Sponsor: International Study and Research Institute.

March 19-20—Washington, D.C.— Conference on Corporate Stake in Meeting the Crisis in the Atlantic Alliance. At U.S. Department of State and John Hopkins School of Advanced International Studies. Sponsors: Atlantic Council, School of Advanced International Studies, International Management and Development Institute. Call: Dale Newsom, 202-785-6800.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

Licensing, Investment Abroad

2048 — NIGERIA — The Benue-Plateau State Government is interested in a joint venture for **construction and operation of a feed mill.** Feed for chickens, pigs and cows would be produced from corn. Precise estimates of market, size of plant and capital investment required have not been determined. Sixty percent equity would be held by the American participant. Turnkey operations are not of interest, and the U.S. partner would provide the required expertise in setting up and operating the plant. Interested firms please send initial correspondence to Foreign Investment Services Stac, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington D.C. 20230. P-74056.

2070 — NIGERIA — The Benue-Plateau State Government would like to **establish an oil mill** on a joint venture with an American company. The State has a strong agricultural base and produces peanuts benniseed (similar to sesame seeds), cotton and soybeans which constitute the source of supply for the mill. The Government proposes equity participation of 40 percent by the State and 60 percent by the U.S. partner. Turnkey operations are not of interest. Interested companies please send initial correspondence to Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74057.

2451 — AUSTRALIA — Subsidiary of large Canadian aluminum company has a keen interest in license or joint venture for the **manufacture of mobile homes** for the Australian market. Recent changes in the country's building codes have encouraged the acceptance of the mobile home building concept. Firm has several manufacturing facilities producing all forms of aluminum and steel products for the local building industry. William Burke, Alcan Australia Ltd., Unwin St., Granville, N.S.W. 2142, Australia. WTDR. P-74062.

2645, 3079 — FRANCE — A manufacturer of office filing accessories and supplies seeks licensing rights for the manufacture and sale in Europe of **filing accessories and related stationery items made of cardboard and/or plastics.** Established in 1895, the firm employs 140. Annual sales are about $4 million. Pierre Netter, Manager, CENTRA, 4, rue Schwoerer, 68007 Colmar, France. WTDR. P-74055.

3079, 3442 — FRANCE — An established firm specializing in the manufacture of sliding garage doors and steel winding curtains is seeking a license from an American firm to make **steel, fiberglass and aluminum sliding industrial doors housed under ceilings.** Company was established in 1963 and employs 80. Annual sales are approximately $700,000. Mr. Poivre, Les Fermetures du Littoral, 18 rue des Ardennes, 62510 Arques (Pas-de-Calais), France, WTDR. P-74075.

3079 — SWITZERLAND — Seeks licenses to manufacture **reinforced plastic tanks and items for the building trade.** Firm is newly formed subsidiary of the Galvanizing Co. of Renens, Ltd., which was established in 1929 and employs 120. Blaise Paul Hofer, Director, Strapol Ltd., 1020 Renens, Switzerland. P-74050.

3100 — ZAIRE — An entrepreneur with experience in the footwear and leather-goods industry seeks a U.S. joint venture partner to establish a plant for producing **quality men's and women's shoes and other leather products, including handbags, belts, wallets, and similar items.** Copies (in French) of the proposal are available from Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74060. OPIC.

3425 — ECUADOR — Well known local businessman and former Mayor of Guayaquil seeks licensing arrangement for manufacture of **hand saws, circular saws and band saws.** Also seeks technical assistance and desires American participant to contribute one-third of $240,000 estimated capital investment. Production would not be shipped to United States. Company provides sales and service throughout Ecuador. Economist Domingo Caballero Martin, Manager, "La Llave" Compania Limitada de Comercio, P.O. Box 1278, Guayaquil, Ecuador. WTDR. P-74071.

3443, 3585 — FRANCE — Manufacturer specializing in production and sale of industrial heating equipment seeks licensing rights for manufacture of **heat pumps and heat exchangers.** Established 1964, has ties with Ste. Arthur Martin, one of France's leading manufacturers of household appliances. M. Charlier, Manager, DEFCO, 90 Boulevard de Charonne, 75020 Paris, France. WTDR. P-74073.

3462, 3568, 3714 — INDIA — Businessmen seek American participants to provide technical know-how for manufacture of **automotive and industrial roller chains,** sizes: ⅝" x ⅜", ⅝" x ¼", ¾" x 7/16" and ¾" x ½". Plan to establish plant at newly created industrial complex at Gurgaon, Haryana. Project cost estimated at $2 million; skilled labor, land, water supply, electric power and other production facilities available in area. Subject to Government of India's approval, Indian businessmen specify following terms of agreement: (1) royalty 5 percent (maximum limit fixed by Government); (2) foreign equity participation up to 40 percent and (3) export commitment up to 35 percent of annual production. Currently own and operate three small to medium-sized companies engaged in production of food grain purifiers, basic drugs and chemicals; export of light and heavy engineering products, light and heavy electricals, consumer products, chemicals and minerals. Sudhir Sareen, 75-E Himalaya House, 7th Floor, Kasturba Gandhi Marg, New Delhi 110001, India. WTDR on Oriole Exports Private Ltd. P-74072. OPIC.

3500 — NETHERLANDS — Large producer of **machine tools** seeks manufacturing rights for new products. Interests include (1) **products requiring high precision metalworking and electronics;** (2) **products requiring normal to simple metalworking skill;** (3) **attractive new**

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce Office.

OPIC indicates that the country involved is eligible for investment insurance coverage written by the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

products outside the metal working field; and (4) **mass produced consumer type articles.** Presently the Dutch firm manufactures a wide range of small and medium-sized machine tools for the optical, electrical and electronic industries. Also produces transfer machines for special applications. Markets its products in The Netherlands and abroad. Interested U.S. firms can obtain details from F. J. Gastkemper, Manager, Industrial Innovation International N.V., Fruithoflaan 91 E1, 2600 Berchem-Antwerp, Belgium. P-74061.

3523 — TURKEY — Seeks license or similar agrement to manufacture agricultural equipment. Initially, wants to establish a facility for production of **tractor-drawn agricultural trailers.** Would expand into the manufacture of other tractor-drawn farm implements such as plows, fertilizer spreaders and cultivators. Firm plans an initial annual output of 6,000 trailers on a single shift per day. The anticipated increase of tractor production in the next several years will create potential for trailers and other implements. Currently, the Turkish company is one of three manufacturers of concrete plyons. Also produces bricks and tiles; employs around 500. Messrs. Coskun Pekcan, Huseyin Pekcan, general managers and principal shareholders, BETOYA—Beton Toprak Yapi Sanayii ve Ticareti A.S., Piyaleoglu Caddesi No. 167, Turgutlu, Manisa, Turkey. Additional details available from Foreign Investment Services Staff. Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74074. OPIC.

3531 — GERMANY — Old, well-established enterprise in central location within the Rhine-Ruhr area, now engaged in **distribution of construction machinery and equipment,** is for sale. Entire operation, including plant, staff, and existing agency representations (including a U.S. earthmoving machinery maker), is included in offer. Plant includes modern repair works (with ten-ton crane), modern social amenities, spacious warehouses, and large external storage area with railway siding and loading ramp. Staff consists of skilled personnel in sales, administration, repair, storekeeping, and other sections. Plant would be well-suited for manufacturing. G. Leyhausen, 46 Dortmund-Gartenstadt, Rosenowstrasse 21 A, Germany. P-74049.

3554 — SWEDEN — Seeks license to manufacture **pulp and paper machinery.** Presently produces special machinery for the graphic arts industry. Products include machines for laboratory work in coating paper. pouch testing machines and paper folding equipment. Firm has sufficient financial resources. Jan Pihl, Managing Director, Research AB, Jarnvagsgatan 5, Sundbyberg, Sweden. WTDR. P-74051.

3561 — INDIA — Bombay pump producer seeks manufacturing rights for **high vacuum pumps.** Interested in obtaining advanced technology for its range of oil-sealed vacuum pumps. Also needs technical assistance to improve the range and performance of its other pumps. Presently, the Indian company makes electric motors of ¼ to 25 h.p. capacity, and dry, oil sealed, and water-ring type vacuum pumps. It operates two plants, and is in the process of establishing foundry facilities. J. B. Sawant Engineering Private Ltd. (JBS), Udyog Nagar, S.V. Road, Goregaon West, Bombay 400 062, India. Further details available from Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-74064. OPIC.

3573 — ARGENTINA — Seeks joint venture to manufacture or assemble **miniature computers.** Initial market estimated at 2,500 units per year. Prepared to purchase necessary components; visit United States for discussions with interested American companies. Alberto Levis, Texsul S.A., Santiago Del Estero 217, 3rd Floor, Buenos Aires. P-74065.

3613 — UNITED KINGDOM — Seeks license to produce **insulated return oil pressure switches.** The switches should be suitable for use on commercial vehicles and buses. The British concern presently produces diesel engine protection systems. Malcolm N. Stewart, Stewart Automotive Equipment, Sherbourne Drive, Windsor SL4, 4AE, England. P-74067.

3662, 3861 — SWITZERLAND — Prominent businessman is interested in obtaining U.S. licenses in the following fields: **photographic industrial and commercial control equipment (quality control, process control, etc.)** for permanent installation in production lines; **photographic security equipment** for installation in banks, post offices and similar facilities. The Swiss businessman is reported to have extensive experience in the application of novel photographic equipment, excellent contacts to industry, and controls a number of companies financially. He is familiar with U.S. management and business practices, and his associates have the necessary manufacturing and sales facilities to produce and market sophisticated equipment. R. Haefliger, Himmelrich 17, 6340 Baar, Switzerland. P-74054.

3679, 2821 — KOREA — Seeks joint venture to produce **integrated circuits** and **polyurethane coated fabric** for clothing, bags and shoes. Currently manufactures eight-track cartridge player with AM-FM stereo receiver. Also operates several textile plants making shirts, sweaters, jackets. tents and sleeping bags. Interested in obtaining U.S. technical knowhow and capital. Korean firm reports annual sales of $35 million. Mr. Kim Man Choong, Samdo Trading Co., Ltd., 118, 2-Ka, Namdaemoon-Ro, Choong-Ku, Seoul, Korea. Additional assistance is available from Mr. Dong Ha Cho, Executive Director, Korea-U.S. Economic Council, Korea Trade Center, C.P.O. Box 6754, Seoul. P-74052. OPIC.

3710 — BELGIUM — Long established automotive assembler and repair parts manufacturer seeks joint venture to diversify present activities by addition of new lines, including **metalworking, soldering, assembly, body parts manufacture, and related activities.** Would consider outright sale of plant employing 200 on 2½-acre plot with 70,000 square feet built-up area. Industrial Sect., Consulate General of Belgium, 50 Rockefeller Plaza, Suite 1104, New York, N.Y. 10020, (212-586-5110). P-74069.

3823 — FRANCE — Seeks manufacturing rights for **equipment utilizing specific electrodes for Na, K, Ca and Cl ion determinations.** The firm specializes in the production and distribution of laboratory and scientific instruments, industrial electronic control apparatus and electrical measuring instruments. The company employs about 40; has sound financial position. M. Diamant, Import-Export Manager, Electro-Synthese, 110 rue Benoit Malon, 94110 Arcueil, France. P-74053.

3960, 3999 — BELGIUM — Small manufacturer and distributor of novelty items and materials, Christmas tree ornaments and decorations seeks association with American firm for production of compatible items including **costume jewelry, costume novelties and miscellaneous notions.** About 80 percent of current $150,000 sales exported, largely to Common Market. Employs 15 in two-storied 3,200-square-foot building on 1.25 acre site. Established 1934. Industrial Sec., Consulate General of Belgium, 50 Rockefeller Plaza, Suite 1104. New York, N.Y. 10020, (212-586-5110). P-74068.

7011 — AUSTRALIA — A joint venture for the development and operation of a **motel and recreation complex** adjacent to the Jenolan Caves in the Blue Mountain area, approximately 100 miles from Sydney, is sought by a local business group. The 180-acre site of the proposed development is the only area available for commercial development; it is surrounded by a national park and protected forest. Plans call for a motel, golf course and restaurant complex which could be managed and operated by an American partner. Dr. R. B. Turtle, Director, Jenolan Pines Pty. Ltd., 685 Darling St., (P.O. Box 132), Rozelle, N.S.W. 2039, Australia. WTDR. P-74070.

8911 — INDIA — An electrical and electronic consulting engineering firm seeks collaboration with a U.S. consulting company in the field of **thermal and hydro power plants and extra-high voltage transmission.** Kirloskar Consultants Ltd., P.O. Box 803, Poona 411004, India. WTDR. P-74058. OPIC.

Agricultural Investment Sought For Ethiopia's Awash Valley

Ethiopia's Awash Valley is 1,200 kilometers long and its basin has an area of 120,000 square kilometers. Surveys indicate that there are potentially 174,000 hectares of irrigable land plus 300,000 hectares of grazing land in the valley. Total cotton production in the Valley provides 50 percent-60 percent of the seed cotton used in the Ethiopian textile industry. Other crops currently grown include tobacco, citrus fruits, cereals, corn, rice and sesame.

In addition to the irrigation network, there is abundant electrical power from three hydroelectric plants and the new Awash-Tendaho Road links the area with export markets via the port of Assab.

At present only about 30 percent of the agricultural resources of the Awash Valley are being utilized. Large-scale U.S. investment in agro-industrial development is particularly sought. Interested companies should contact the Planning Officer, IEG Awash Valley Auth., P.O. Box 591, Addis Ababa. P-74011. OPIC.

Investors Invited For Plants In Ecuador Having Preference Throughout Andean Market

Ecuador has been assigned exclusive authority by the Andean Group countries in a number of mechanical and electrical machinery items. Under these assignments, items alloted to Ecuador would be free from tariffs within the subregional market that includes Venzuela, Colombia, Ecuador, Peru, Chile and Bolivia.

Other Andean Group countries are prevented from encouraging domestic production of the following items: dairy industry machinery, centrifugal machines and centrifugal driers, manometers, electric power switches for under 1,000 volt service, planers and shapers, hydraulic presses, electric and electronic controlling and measuring instruments, sealed refrigeration units, air conditioners, woodworking machinery and air compressors.

Additional details regarding special incentives available to firms participating in projects leading to production of the aforementioned items are available to seriously interested American investors from the Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. **P-74063.**

Licensing In U.S.

These are opportunities to manufacture foreign firms' products in the United States under a licensing agreement or, in some cases, as indicated, in partnership, or for outright purchase of existing U.S. operations. For additional information on these opportunities write the Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248) referring to the appropriate file number.

GERMANY—A small to medium size manufacturer of wood processing machinery is interested in licensing the manufacture in the United States of its **automat for measuring and cutting chipboard and hardboard panels.** The automat has electronically operated program control and fully automatic digital measuring features with a cutting depth of up to 200 mm. **File 2530.**

SWEDEN—A small manufacturing company is seeking a U.S. firm to manufacture and market under license its **special roof**—of corrugated metal sheets laminated with fiber glass—which eliminates dripping from moisture condensation. **File 2531.**

SWITZERLAND—A small to medium company is seeking a joint venture partner for production in the United States of its **films for the graphic arts.** The U.S. partner should have the marketing capability and provide most of the manufacturing facilities. **File 2532.**

FRANCE—A French manufacturer of **bronze powder flakes** is interested in acquiring businesses engaged in the same field. **File 2533.**

GERMANY—A large German firm whose present operations include iron and steel fabrication wants to acquire full or part ownership in a U.S. firm with **modern steel production and rolling** facilities for the complete line of carbon steel products. **File 2534.**

GERMANY — A major German firm wants to acquire a medium-size U.S. firm manufacturing **hydraulic equipment** of any kind with modern facilities and well-established trade contracts in the United States. **File 2535.**

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Trade Opportunities Division, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

Abbreviations used are: I (importer); D (distributor); M (manufacturer); A (agent); R (retailer). To avoid delays, requests for loan material must specify country, commodity, foreign government agency.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information, including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

Direct Sales

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Bituminous coal, lignite mining

12110 — GERMANY — Coking coal. One million metric tons per yr. for ten-yr. period. Specifications: moisture—9 percent, Ash—7.5 percent, volatile parts—27 percent, sulphur—up to 0.9 percent, swelling index—5 to 7, dilatation—plus 150. At current prices, annual purchases are estimated at forty million dollars. Offers are requested on f.o.b. basis U.S. east coast port in full shiploads. Payment will be against irrevocable letter of credit, cash against documents. Destination of coal not divulged, but not West Germany. Manufactures railroad rolling stock, streetcars, containers and ship equipment. Cable — Mr. Otmar W. Thienes, Hansa Waggon AG, Pfalzburgerstrasse 251, P.O. Box 110109, 28 Bremen. Cable: Hansawaggon; Telex: 02444-23; Tel: 0421-454011.

●15100 — ALGERIA — Construction of an agricultural equipment factory complex at Sidi-Bel-Abbes (either prefabricated reinforced concrete or metal). The title of the project is "Complexe Machinisme Agricole de Sidi-Bel-Abbes." DIAG, a German firm, is supplying the equipment and has a turnkey contract. However, it appears willing to open actual construction to international tender. Interested companies should contact: Deutsche Industreanlagen GmbH (DIAG), 18, Ave. Claude DeBussey (P. P. 9 Plateau Sauliere), Algiers, cables: RENREW ALGER; TELEX, 52054; Tel.: 66-41-26. Correspondence in French is required. One complete set of drawings and specifications may be reviewed in the Construction & Bldg. Materials Program, Room 2118, U.S. Dept. of Commerce, Washington, D.C. (202-967-3602).

Heavy construction, except highway and street construction

●16200 — LIBYA — The Electricity Corporation, Benghazi, invites specialized firms to bid for the construction of a power and desalination plant at Ben-Gawad, which lies on the Mediterranean Sea 410 kms. to the west of Benghazi. This will be a turnkey project which includes the following: a) pressure steam turbo generating seats with each having about 2,000 Kw. output, b) two multistage flash evaporation desalination units each of 2,700 cubic meters/day capacity, c) 10.5 Kv. switchgear, d) all auxiliaries, sea water intake, civil works, fuel and water tanks, etc. Specifications and tender documents are obtainable from the Electricity Corporation, P. O. Box 3047, Benghazi, Libyan Arab Republic. It is expected that specifications will be issued at the end of January. The date of receiving tenders is about four months from the date of issuing specifications. The provisional competing time of the plant is required to be about 24 months from the date of acceptance of the tender.

●16200 — **PHILIPPINES** — Firms are invited to prequalify to bid for the construction of the power facilities for Agus No. II Hydroelectric Project, Saguiaran, Lanao del Sur Province, Mindinao. The project is to be financed by a loan from the Asian Development Bank and participation is limited to firms from member countries of the ADB. Copies of the Confidential Statement for Determining Prospective Bidders' Responsibility form, including the project highlights and bidding guidelines, are available from: The General Manager, National Power Corp., 161 Bonifacio Drive, Port Area, Manila. Prequalification deadline is March 22.

●16200 — **SINGAPORE** — The Ministry of the Environment invites a tender for the design, supply, testing, delivery to site, unloading, storage, complete erection, commissioning, site testing and painting of the plants and equipment for three sewerage pumping stations (Tender No. SQS/WB/87/74/1). Work covered by this tender may be eligible for payment in part from a loan from the World Bank. Persons or companies either within Singapore or overseas who are not registered Public Works Department contractors will be permitted to tender as "Specially Registered Contractors" within two weeks of the invitation to tender. Copies of the registration and tendering procedures for "Specially Registered Contractors" are available from the Construction & Bldg. Materials Program, Room 2118, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-3602). Bid deadline is March 8. The bid-letting agency is the Ministry of the Environment. Attn: Senior Executive Engineer, 9th Floor, National Development Building, Maxwell Road, Singapore 2, Republic of Singapore.

Paper mills

●26200—**GUYANA**—Government import agency requires annual supply of 2 400 rolls of standard offset newsprint for government-owned newspaper. Specifications: 900 lb. rolls; 52 grams per square meter; three inch diameter metal cores; 33 5 inch to 34 inch width; roll diameter 40 inches. Quote c.i.f. Georgetown price. No bid deadline. Call or cable Mr. C. C. Low A Chee, General Manager. External Trade Bureau, TELEX GY225; Tel 64117.

Industrial chemicals

●28100-32900 — **BANGLADESH** — Manganese dioxide (electrolytic)—50 metric tons; acetylene black (soot)—40 metric tons and graphite powder—20 metric tons. Tender Number IMP/26/73. Bid deadline May 2. Bids should be forwarded to the Manager, Import and Export Department. Rohinoor Group of Industries, 349/350 Tejagon Industrial Area, Dacca, Bangladesh, Tender documents and detailed specifications can be obtained from the above address at a price of TK 20.00 or its dollar equivalent, per set (not refundable).

Agricultural chemicals

●28700—**ECUADOR**—Magnesium sulfate —1,000 metric tons; triple superphosphate—8,500 tons; muriate of potash—12,500 tons; ammonium phosphate (18-46-0)—14.500 tons; urea—20,000 tons; ammonium sulfate—4,500 tons; anhydrous ammonia—3,000 tons; phosphate rock —25,000 tons to be shipped in 4.000 ton units. Contracts are also needed for 5,000 tons of triple superphosphate for delivery in June or July and 10.000 tons of ammonium phosphate for delivery in May or June by the Ministry of Agriculture of the Government of Ecuador. Prices quoted should be f.o.b. or c and f Guayaquil. Interested potential suppliers should contact Engineer Leopoldo Moncayo, Director De Desarrollo Agricola, Ministerio De Agricultura Y Canaderia, Guayaquil 1740, Quito. Ecuador. No tender number or bid deadline indicated.

Special Action

The following trade notice is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

35851—BOLIVIA—Air conditioning system, with heating potential, for 12 story, 120 room hotel, to include unitary system for first three floors and individual units for all rooms. Also, ice-making machines. Descriptive literature desired. Correspondence in Spanish or English. Hotel Libertador is La Paz' newest and best and will open second hotel in Santa Cruz. Hotel Libertador S A. Attn.: Mr. Robt. Barragan, Casilla 4482. La Paz. Cable Credinform. La Paz. Telex 5259—ITT 3560085.

●28700 — **LIBERIA** — Fertilizer (NPK) 15-15-15, dry form—1500 metric tons. If complete mixture not available, substitute (fertilizer) urea (specification not indicated), potash and superphosphate in the same quantities for mixing locally. Ammonium sulphate, 21 percent (N)—500 metric tons. No tender number or bid deadline indicated. Buyer is Government Ministry of Agriculture and has duty free privileges. Bids should be submitted to Honorable Arnie C. Diggs, Assistant Minister of Technical Services, Ministry of Agriculture, Tubman Boulevard, Monrovia.

Fabricated rubber products

3069587 — **PORTUGAL** — Rubber tubing, approx. 9 mm interior, 16 mm exterior dia., for 60 kilos per sq. cm. 30 000 ft. Annual requirements approx. 150,000 ft. Joaquim Dias Rocha, Pulverizadores—Joaquim Rocha, Milheiros, Maia, Oporto.

Flat glass

3211126 — **ZAIRE** — Tinted sheet (window) glass for sale and installation in aluminum frames. Potential purchaser mfr. aluminum window and door frames for sale to construction industry. Note that glass must be tinted. Correspondence preferably in French. Mr. Famach Luc, Tech. Dir., Societe Metal Aluminum, 8E Rue Limete, Kinshasa. Cable METALU, telephone 77723.

Glass, glassware

3229323 — **AUSTRALIA** — Glass chopped strand rovings, approx. 200,000 kilos per yr. with specifications equivalent to Turner Bros. & Newell's ECR144 or ECR101, or equal. Firms will send buyer to U.S. April/May 1974, thus interested firms should indicate willingness meet with buyer in their reply. Mr. G. W. Knaggs, Mgr., Sapphire Plastics Pty Ltd., 20 Rye Lane, Maddington, Western Australia 6109.

Concrete, gypsum, plaster products

●32700 — **NICARAGUA** — Bids are being requested for the supply and installation of twenty kilometers of concrete pipe, eight inches in diameter, for sewage construction works in various districts of the city of Managua. Tender number is Licitation AA/76. Bid deadline is March 8. Bid documents are available for $100 plus approx. US$3 for airmailing from the Departamento Nacional de Acueductos y Alcantarillados, Apartado Postal 968, Km. 6 Carretera Norte, Managua. Bonds required are a US$28,571 bid bond and a 20 percent performance bond. Due to the availability of concrete pipe from Nicaraguan and Costa Rican manufacturers, the only opportunity for interested U.S. firms is seen in the installation works. The U.S. Embassy in Managua reports that only three local firms have the equipment, though limited in size and number, for trenching and pipe laying operations. Interested U.S. contractors may seek association with local construction companies in the future for biddings of this nature. Current sewage and potable water works are part of a $16.9 million project financed with IDB and Government of Nicaragua funds. Project bids are scheduled to continue during the next three years.

Abrasive, asbestos, nonmetallic mineral products

3291411 — **NETHERLANDS** — Steel shot abrasive-size range S110 to 660; grit abrasive—10 to 80. Total of 4 000 to 5.000 tons needed as soon as possible as Beca has 30-day option to take over existing European distribution system provided abrasive suppliers can be located. Reorders anticipated. Call or write: Mr. Steve Carpenter, Dir., Beca B.V., P.O. 3525, Nieuw Beijerland. Telephone 01869-2294. Direct sale and representation.

Steel mill products

●33100 — **INDIA** — Ground wires: 70 metric tons of 7/3.55 mm HTG steel and 280 metric tons of 7/3.15 mm HTG steel. Tender No. IDA/TNEB/3; bid deadline April 18. Superintending Engineer, Technical, Tamil Nadu Electricity Board, 157 Anna Salai, Madras 600002, India. Tender documents available at the India Supply Mission, 2536 Massachusetts Avenue, N.W., Washington, D.C. 20008.

33100 — **INDIA** — 3,000 m.t. light section rails, 30 pounds or 24 pounds, with or without punched holes, required for underground mines. Requests pro forma invoice indicating prices, delivery schedule and terms of payment. Purchase Officer, Bharat Coking Coal Ltd., 4 Fairlie Place, Calcutta.

●33100 — **PAKISTAN** — (a) 4,400 kilogram tension wire annealed. (b) 10,863 kilogram steel armoured pipe flexible. Tender No. PR-I/73/CARR/2; bid deadline March 11. Secretary, Government of Pakistan, Ministry of Political Acairs and Communications (Railway Board) P.W.R. Hdqrs., Empress Road, Lahore. Tender documents available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2438).

33100 — **PERU** — 9,800 m.t. wire rod (¼" diameter), 1,030 m.t. wire rod (⅜" diameter), various chemical composition; 3,340 m.t. wire rod (¼" diameter), 1,160 m.t. wire rod (⅜" diameter), various chemical composition. Empresa Siderurgica del Peru, Ave. Tacna 543, Pisc 11, Lima 1, Peru. Specifications available at above address.

Rolling, drawing, extruding of nonferrous metals

●33500 — INDIA — 110 KV oil filled power cables. Tender No. IDA/TATA/2; bid deadline April 15. Chief Engineer, Tata Power Co., Ltd., Tata Vidyut Karyalaya, Murzban Road, Bombay, India. Specifications available at above address at a cost of $13.75.

●33500 — IRAN — 10,000 kgs. Babbitt metal with 5% tin acc. to DIN 1703; 10,000 Babbitt metal to the following analysis: Sb 10%, Sn 5%, Pb 85%, Cu 0%. Tender No. 2465/52; bid deadline April 8. Iranian State Railways, Tehran. Specifications available from Copper, Lead and Zinc Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2438).

3356279 — ITALY — Titanium in bars, dia. ranging from 30 to 150 mm. max. length 300 mm. Required for mfr. of sonotrodes to be fitted on special welding machines. Prompt supplier responses urged. Reply to Giorgio Vigano, Import Export Mgr., Ditta Vigano, Via Saluzzo 106 Bis, 10126 Torino. Cable Vigano Torino, Tel. 688915. WTDR 5/73.

Heating apparatus, plumbing fixtures

●34300 — FEDERAL REPUBLIC OF GERMANY — Bundesbahnzentralamt, 495 Minden, Weserglacis 2, Dezernat 26B, one of the two purchasing and development offices of the Federal Railways (Deutsche Bundesbahn), seeks to locate U.S. suppliers of incinerating toilets for replacing conventional toilets in its 5,000 unit express car fleet (10,000 toilets). The toilet systems should conform to the following specifications: 1) use electric energy only (2 kw. per toilet), 2) waste should be reduced to an inorganic. odorless and bacteria-free ash, 3) no water or chemicals should be used. 4) non-polluting, 5) provide self-cleaning devices, 6) usable during stops at stations, and 7) capable of operating up to an average of 10 times per hour at 0.4 liters urine and feces per use. Tests have already been conducted on chemically operated toilets but they were judged unsatisfactory as user and service personnel face potential hazards from the highly caustic chemicals involved. Manufacturers and suppliers of incinerating toilet systems are asked to forward descriptive literature and prices on their products by fastest means to: Economic/Commercial Section, American Consulate General, Box 515, APO New York 09080.

Fabricated structural metal products

●34400 — INDIA — Design, fabrication, and supply of 220 KV single circuit transmission towers. Tender No. IDA/KSEB/2; bid deadline March 15. Supply of power conductors, groundwire, insulators, and hardware. Tender No. IDA/KSEB/3; bid deadline April 20. Financing through IDA credit. Tender documents available for $13.75 (check drawn on any Indian Bank) from the Chief Engineer (Electricity), Kerala State Electricity Board, P.B. No. 65, Trivandrum 695 023, Karala, India.

Fabricated metal products

3494357 — BELGIUM — Butane/propane gas pressure reduction valves (input of gas to valve: 500 liters per hr., output of gas: between 30 & 50 grams). Reply to—Mr. J. Senave, Chief of Dept., Contigea S.A., 140 Rue de Stalle, 1180 Brussels.

Construction, mining, materials handling machinery, equipment

●35300 — MOROCCO — Preselection of firms for equipment of planned new Nouasseur Airport Terminal. Includes supply and installation of telescopic gangways, freight lifts, automatic doors, escalators, baggage self loaders, baggage weighing systems. internal television and telephone networks. Correspondence preferably in French. Contact: Service des Bases Aeriennes, B.P. 119. Rabat. Morocco. Interested firms should furnish addressee with basic company data and financial references. They will receive bidding documents in due time.

●35300 — TAIWAN — One 50 ton nonpropelled floating crane required by: Central Trust of China, Procurement Department, Taipei. Taiwan. Bid No. GF3-623593 with deadline of April 3.

Special industry machinery

●35500 — ARGENTINA — Basic engineering and design of petrochemical plant to produce phenol and acetone from cumene. Capacity would be 20,000 metric tons/year of phenol and 12,000 MT/year of acetone in first stage (scheduled completion 1976/7); and 32,000 MT/year and 19.000 MT/year in second stage (scheduled completion 1981). Tender number 1,106/73; bid deadline March 19. Yacimientos Petroliferos Fiscales (YPF), Gerencia Petroquimica, Sarmiento 770, Plania Baja, Buenos Aires. Bid documents available from YPF at above address for 500 pesos (approximately $50.00) per copy.

●35500 — BURMA — Total of 400 sets of moulding boxes. Tender number BRC/IDA/13(T)71(M)73-74; bid deadline March 13. Managing Director, Burma Railways Corp., Bogyoke Aung San St., Rangoon.

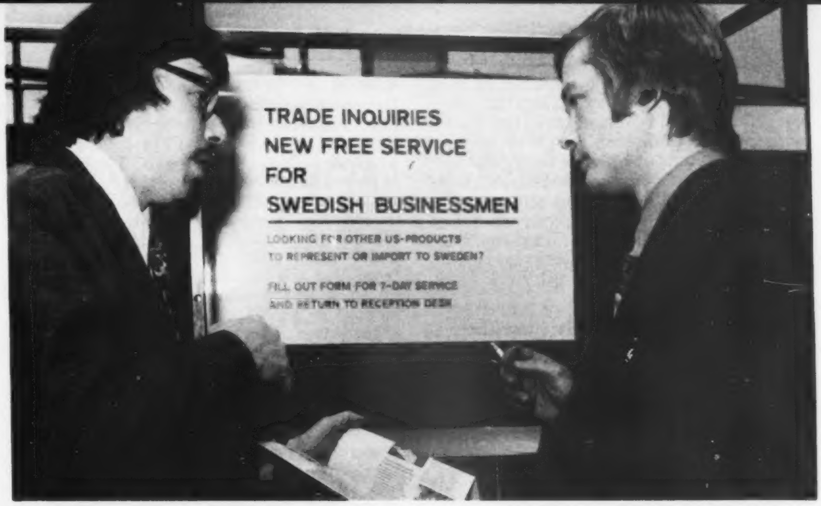
●35500 — KOREA — Calendering machine; high speed cutter for paper; Automatic slitting machine for paper; cutting knives for machine; vibration screen for paper making; surface grinding machine; high pressure cleaning apparatus. Tender number KDFC-IBRD-74-5; bid deadline March 18. Korea Development Finance Corp., Cho Heung Bank Bldg. 14, 1-KA, Mandaemun-Ro, Chung-Ku, Seoul 100 or Hankuk Paper Mfg. Co., Ltd., 56-1, Supyo-Dong, Chung-Ku, Seoul 100. A review copy of specifications available on a short term loan basis to firms domiciled in the U. S. from the Transportation and Capital Equipment Div., Room 2806, U. S. Dept. of Commerce, Washington, D. C., 20230, ★(202-967-5593).

General industrial machinery

●35600 — NICARAGUA — Supply and c.i.f. Corinto delivery of following: Eight deep water well pumps with capacities ranging from 500 gallons per minute/490 feet load, to 2,000 gallons per minute/433 feet load, complete with electric motors and starters. Tender number not specified; bid deadline March 22. Empresa Aguadora de Managua, Plantel Asososca, Managua. Bid documents are available for U.S. $30.00 from the Empresa Aguadora and from Hazen & Sawyer Offices. 5950 Washington St., Hollywood, Florida; they may also be reviewed at Hazen & Sawyer Offices. 360 Lexington Ave., New York City. Bonds required; five percent bid bond, 20 percent performance bond.

Machinery

3592233 — UNITED KINGDOM — Aluminum pistons for use in firm's range of diesel engines. Piston size required approx. 8 in. dia. by 11 in. length. Firm is


TRADE INQUIRIES
NEW FREE SERVICE
FOR
SWEDISH BUSINESSMEN
LOOKING FOR OTHER US-PRODUCTS
TO REPRESENT OR IMPORT TO SWEDEN?
FILL OUT FORM FOR 7-DAY SERVICE
AND RETURN TO RECEPTION DESK

TRADE LEADS PROGRAM GETS A BOOST—*The Commerce Department's Trade Opportunities program, under which U.S. Commercial Officers overseas reach prospective purchasers of specific U.S. products, is the subject of this display at a recent exhibition at the Stockholm U.S. Trade Center. It is expected that more than 12,500 offers to buy U.S. products will be disseminated to U.S. companies during the current fiscal year under the program. A computerized system speeds most of these leads directly to subscribing firms; others are published in this Worldwide Business Services section. James Boney (left) of the U.S. Trade Center staff explains the program to businessman Hakan Isakssen.*

mfr. of diesel engines & member of very large Hawker Siddeley group of companies. Pistons required are for incorporation into their own range of engines which give output of up to 2,000 hp.; needed: about 2,500 per yr. Present British supplier unable to meet growing demand & there is no other local source of supply. Reply to—J. K. Hughes, Purchasing Mgr., Mirrlees Blackstone Ltd., Blackstone Works, Stamford PE9 1UH. Tel: 0780-4641.

Electric transmission, distribution equipment

●36100 — INDIA — Supply of 220/110 KV and 66/11 KV power transformers for electrical transmission and distribution. Tender No. IDA/KSEB/1; bid deadline March 7. Correspondence should be with the Chief Engineer (Electricity), Kerala State Electricity Board, P.B. No. 65. Trivandrum 695023. Tenders available for 100 rupees (approximately $12.50) cash or check from tenderer or India Supply Mission. 2536 Massachusetts Avenue, N.W., Washington, D.C., 20008.

Communication equipment

●36600 — ALGERIA — The Ministere de l'Information et de la Culture, Direction de l'Administration General, 119 rue Didouche Mourad, Algiers, has issued tender No. 281/E for the supply of four quadruplex tape recorders and the installation of one video tape recorder switching system. Bid deadline is May 1. Copies of tender announcement and specifications are available only from Radiodiffusion Television Algerienne, Direction des Services Techniques et de l'Equipment, Bureau 721, 21, Blvd. des Martyrs, Algiers. Cables: RTA ALGER; Telex: 52042.

●36600 — ECUADOR — Supply of an addition of 2,000 trunk lines to city of Guenca telephone network. Tender No. 1-74, bid deadline March 6. Correspondence in Spanish essential. Specifications are available for non-refundable 3,000 sucres ($120) from Etopa-Empresa Publica Municipal de Telefonos. Agua Potable Y Alcantarillado, Palacio Munipipal, P.O. Box 297, Cuenca, Ecuador.

●36600 — ETHIOPIA — The Imperial Board of Telecommunications of Ethiopia, P.O. Box 1047, Addis Ababa, has issued tender No. 22/74 for the supply of manual cordless exchanges (20) designed for use on table tops or shelves, and fifteen (15) automatic exchanges. Bid deadline is March 22. Copies of tender announcement and specifications are available from above address or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1001, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

●36600 — ETHIOPIA — Supply of 24 channel VHF/UHF radio telephone equipment with automatic baseband switching units. frequency modulated radio link in 400 MHZ band for up to 24 telephone channels using appropriate multiplex equipment. Invited by the Imperial Board of Telecommunications of Ethiopia. Tender documents available on 5-day loan basis, from the Science and Electronics Division, Room 1001, U.S. Department of Commerce Washington, D.C. 20230; ★(202-967-2939) Tender No. 23/73, bid deadline March 25.

●36600 — WEST GERMANY — The Organisationsstab Zur Erstausstattung der Theoretischen Medizin, 69 Heidelberg, IM Nuenheimer Feld 4, has issued a tender No. KAP 0412 Titel 54649, Wissenschaftliche Werkstatten for the supply of equipment for electronic and mechanical workshops. Bid deadline is March 12. Copies of tender announcement and specifications are available from the above address for $3.60 per set of on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1001, U.S. Dept. of Commerce, Washington, D. C., 20230, ★(202-967-4822).

●36600 — IRAN — The Telecommunication Company of Iran, Supplies Dept., Koorosh Kabir Avenue, Bisim Pahlavi, Room 303, Tehran has issued tender No. 52/48 for the supply of 4000 telephone sets. Bid deadline is March 12. Copies of tender document and specifications are available only from the above address for 5000 Rials (67.50 Rials = USS $1).

●36600 — IRELAND — The Department of posts and Telegraph, Engineering Branch, Marlborough Street, Dublin 1, has issued tender No. ML/73 for the supply, installation and testing of a microwave radio link for telephony for four (4) routes. Bid deadline is April 4. Copies of tender announcement and specifications are available from above address or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division. Room 1001. U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

●36600 — LIBYA — The General Corporation for Ports and Lights, Sharia Damascus P.O. Box 648, Tripoli, Libya has issued tender No. 1/74 for supply and installation of HF and VHF equipment and test instruments. Bid deadline is March 20. Copies of tender announcement and specifications are available only from above address for $136 per HF set and $68 per VHF set.

Transportation equipment

3799991 — GUATEMALA — Boat trailers made of aluminum or galvanized steel to be used in 15 and 17 ft. boats, with est. value of not over $200 ea. Interested in buying approx. 6 units of 15 ft. boat trailers & 4 units of 17 ft. boat trailers. Capacity of trailers unknown; catalogs & quotations appreciated. Reply to or cable—Emilia S. de Jerez, Mgr., Agencia Evinrude, P.O. Box 252, Guatemala City. Cable: JERESAN; Tel. 67579.

Instruments for measurement, control and analysis

●38200 — WEST GERMANY — The Organisationsstab Zur Erstausstattung der Theoretischen Medizin (OETM), 69 Heidelberg, IM Neuenheimer Feld 4, has issued tender No. KAP 0412 Titel 54649 Grundversorgungs-Werkstaetten for electronic testing and measuring devices and workshop equipment. Bid deadline is March 12. Copies of tender announcement and specifications are available from above address for $3.60 per set or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1001, U.S. Dept. of Commerce. Washington, D.C., 20230. ★(202-967-4822).

Service industry machines

●38500 — BELGIUM — NATO has issued a request for bids for a single color offset press with two feed tables, two receiving tables, and a set of tools; sheet size 48 x 65 cm maximum and 28 x 28 cm minimum. Tender number NATO 1110 Brussels, Belgium. Deadline for bids is March 10.

Photographic equipment, supplies

3861941 — ZAIRE — X-ray film. Potential buyer is importer & representative for medical equip. Correspondence preferably in French. Reply to—Mr. Nzinga/Mufidzia, Mandono, Dir.. Commercial Agency Intercontinentale, B.P. 6565, Kinshasa/Ndolo. Cable Cagi Kin; Telephone 76031.

Wholesalers

50930 — GERMANY — Aluminum scrap. Buyer is a metal trading company. Annual sales volume approximates DM 3 million. Walter Loebel, Co-owner, Boehmer & Loebel, Metalle-Industriebedarf, 4005 Meerbusch 2, Neuer Weg 6. Tel. (02159) 2816.

Viscose Staple Fiber Needed In Morocco

The Fiber Brickerage Firm COMARBEL, 54 Rue Pelle, Casablanca, Morocco, desires to purchase 3000 tons of viscose staple fiber, 1½ denier cutting, 31-32mm. and 38-40mm., both in bright and dull finishes. Estimated value by firm is $3 to $5 million. Delivery desired throughout 1974. Several other purchase inquiries from other firms have been received by the American Consulate for 1000 tons each. Information on these opportunities may be obtained directly from: American Consulate, No. 1, Place de la Fraternite, Casablanca, Morocco.

Singapore Invites Bids On Hospital Equipment

The Director of Medical Services for Singapore's Ministry of Health wants hospital instrumentation and equipment systems for the proposed Singapore general hospital. Complete surgical and medical equipment as well as service equipment is needed, and proposals should be submitted by March 27, to the Ministry of Health, Palmer Rd., Singapore.

U.S. companies that do not have local agents should send duplicate copies of their proposals to the American Embassy, Singapore.

Tunisian Four-Year Plan Projects Listed For U.S. Investors

The American Embassy in Tunis has prepared a list of major projects to be undertaken in Tunisia during the remainder of the current four-year plan, 1973-76. The list contains the sector and type of project, estimated cost of each project and timetable for the venture. The listing will be useful to American exporters, construction and enginering firms and potential investors interested in expanding their activity in Tunisia or in establishing themselves there. Copies are available from the Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74059. OPIC.

Twenty-Seven Developing Nations Request UNDP Help On 56 Projects

Twenty-seven developing countries have submitted fifty-six preliminary requests for financial and technological assistance from the United Nations Development Program (UNDP).

These are requests from the developing countries which have not been funded nor has an executing agency been designated to implement them. They are made available to U.S. firms as potential projects on which future bid proposals may be requested, or as indications of the industrial and social plans of the requesting countries.

U.S. firms are cautioned that these projects may not be approved for technical or other reasons.

Interested U.S. firms may obtain individual summaries of these projects from the Trade Opportunities Program, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. Please include a pre-addressed label with your request, and identify each project desired by project number, country and title.

BGD/73/042 — BANGLADESH — Assistance to the agricultural institute for winter crops.

BHU/72/003 — BHUTAN — Royal Bhutan polytechnic, Deothang Vocational training.

BHU/72/004 — BHUTAN — Teacher development center.

BHU/72/010 — BHUTAN — National sheep and yak development project.

BOL/71/518 — BOLIVIA — National Telecommunications Institute, La Paz.

BOL/73/002 — BOLIVIA — Earth resources technology satellite national plan for the inventory of natural resources.

BOL/73/003 — BOLIVIA — Development of metal working industries.

BOL/73/007 — BOLIVIA — Study and promotion of regional development (PRODERO).

BOL/73/008 — BOLIVIA — Investigation and demonstration of ground water resources in the Cochabamba area.

BOL/73/012 — BOLIVIA — Animal health in the eastern part of Bolivia.

BRA/72/010 — BRAZIL — Hydrology and climatology of the Brazilian Amazon River Basin.

CHI/72/019 — CHILE — Expansion of the technological institute of Chile, (INTEC) — Polymers and plastics group.

CYP/72/018 — CYPRUS — Industrial development services.

EGY/73/051 — EGYPT — Alexandria University Radioisotopes center.

GRE/73/006 — GREECE — Exploration for Uranium in Central and Eastern Macedonia and Thrace (Phase II).

HAI/73/004 — HAITI — Nutrition and rural development program.

HAI/73/005 — HAITI — National institute for vocational training.

IRQ/72/008 — IRAQ — Public Administration reform and development.

KMR/72/006 — KHMER REPUBLIC — Establishment of pilot plant for wood preservation.

LEB/73/005 — LEBANON — Animal production, development and training.

MDV/73/002 — MALDIVES — Vocational training center, Male.

MAL/71/536 — MALAYSIA — Metal industries development center of Malaysia, Kuala Lumpur (MIDCOM).

MAT/73/005 — MALTA — Assistance to small-scale industries.

OMA/73/008 — OMAN — National farm economic survey.

OMA/73/009 — OMAN — Water resources center.

OMA/73/010 — OMAN — Soil and water management.

PAR/72/006 — PARAGUAY — Rural vocational training.

PAR/72/011 — PARAGUAY — Institute of telecommunications.

PAR/73/001 — PARAGUAY — Navigation study of the Paraguay River (Phase II).

PER/71/551 — PERU — Management and integrated utilization of tropical forests.

PER/72/003 — PERU — Program of socioeconomic research for planning.

PER/72/032 — PERU — Promotion and development of medium and small-scale industries.

RVN/72/007 — REPUBLIC OF VIETNAM — Telecommunication training center, Saigon.

RVN/73/005 — REPUBLIC OF VIETNAM — Water supply and sewerage in urban communities.

RVN/73/006 — REPUBLIC OF VIETNAM — Assistance to the National Corporation for the development of industrial zones (SONADEZI).

RVN/73/011 — REPUBLIC OF VIETNAM — Rubber production development.

RVN/73/012 — REPUBLIC OF VIETNAM — Educational analysis and planning.

RVN/73/015 — REPUBLIC OF VIETNAM — Civil aviation development.

RVN/73/019 — REPUBLIC OF VIETNAM — Agricultural planning.

RVN/73/023 — REPUBLIC OF VIETNAM — Assistance to secondary and normal education in agriculture.

RVN/73/026 — REPUBLIC OF VIETNAM — Establishment of a model regional (area) animal disease, control and training center.

RVN/73/029 — REPUBLIC OF VIETNAM — Economic development planning.

RVN/73/030 — REPUBLIC OF VIETNAM — Industrial crops development.

RVN/73/032 — REPUBLIC OF VIETNAM — Seed production and certification.

RVN/73/034 — REPUBLIC OF VIETNAM — Irrigation development project.

SYR/72/012 — SYRIAN ARAB REPUBLIC — Faculty of pharmacy, University of Damascus.

THA/72/006 — THAILAND — Regional development planning in Northern Thailand.

TUR/72/029 — TURKEY — Strengthening civil aviation.

TUR/72/036 — TURKEY — Uranium exploration in the south-west.

URU/72/014 — URUGUAY — Industrial and technological development.

YUG/73/010 — YUGOSLAVIA — Mineral exploration in the Socialist Republic of Montenegro (revised).

RAS/73/012 — REGIONAL (ASIA) — Task force on human environment.

RAS/72/160 — REGIONAL (ASIA) — Technical support for the Trans-Asian Railway.

RLA/72/025 — REGIONAL (LATIN AMERICA) — Advisory and training services for regional rural development in Caribbean.

Hong Kong Helmet Requirement Opens U.S. Sales Opportunities

Pursuant to Hong Kong's Road Traffic (Protective Equipment) Regulations of 1973, operators and any passengers on motorcycles (except passengers in side cars and Sikhs), are required as of Jan. 1 to wear a protective helmet conforming to any of the following standards: British standard 2001, British standard 1869, British standard 2495, Japanese industrial standard JIS T 8133-1970, Australian standard E 33-1968, American national standards institute Z90.1-1966, Z90.1-1970 and Z90.1-1971; Institute Belge de Normalization Benor NBN 626, Deutsche Normen Din 4848, French national standard Afnor NFS 72-301, and Dutch national institute for road vehicles TNO.

The above may represent possible sales for manufacturers of these types of helmets not presently represented in Hong Kong.

Greece Wants Information On U.S. Farm Equipment

The Government of Greece desires information and brochures on agricultural equipment from major U.S. suppliers. The Inspector of Agriculture for Central and Western Macedonia reports that the Government of Greece plans major effort to remedy meat shortage by increasing number of piggeries and cattle units during coming year. The inspectors office issues licenses for all new units and is in ideal position to provide applicants with information on new equipment.

Information is desired on piggery installations, slaughter house and packing plant equipment, feed mills, refrigeration equipment, and related items. Information should be sent direct to: Dimitrios Kertemelidis, Inspector of Agriculture, District Government for Central and Western Macedonia, Thessaloniki, Greece.

Future Construction Abroad

PAKISTAN—Planning activities for Port Qasim, Pakistan's **new deep water port,** are rapidly coming to a head. Located about 30 miles from Karachi, Port Qasim is expected to become Pakistan's principal port for handling bulk cargo within a decade. Immediate plans call for a basic port of five berths, three to handle cargoes for the steel mill, one for grain and one for cement. Ttotal cost is projected at $35 million, of which approx- $20 million is expected to be spent on imported goods and services. The long range plan for Port Qasim envisions a port of 20 berths for bulk cargo at a cost of more than $130 million. The Japanese Government is assisting the Pakistani Government in feasibility studies and preliminary planning, but actual project financing is expected to come from the World Bank or the Asian Development Bank. Control of the development has been vested in the Port Qasim authority, a semi-automomous agency under the ultimate control of Pakistan's Ministry of Communication's and Political Affairs. National Engineering Services (PAK) Ltd. (NESPAK) has been named as consultant for planning, design and construction. Tenders will be open to international bidding and U.S. suppliers will have excellent opporunities to make substantial sales of the following products and services: floating craft including tugs, launches, dredges and other floating port machinery; ship repair, drydock and sliwlay equipment; transportation machinery and equipment; bulk cargo loading equipment for handling iron ore, coal, grain, cement and oil between ship and shore; dock fenders; steel tabular and box piles, sheet piles, steel and cast iron pipes and other steel products; civil construction and contractors. Interested U.S. firms should send two sets of catalogs and technical data on the goods and services mentioned above to the American Consulate General, 8 Abdullah Haroon Rd., Karachi, for presentation to the appropriate officials, by March .

CANADA—Plans have been announced for the construction of another **major hotel in downtown Montreal.** Tenders for sub-trade contracts are due to be called on about April 1, and bids will be accepted from U.S. firms. Contracts for excavation and preparatory construction work have already been negotiated. The 600-room, 25-story hotel will be located on McGill College St. between President Kennedy St. and de Maisonneuve Blvd. It will be air conditioned, have gas and oil heating systems, and a sprinkler system. Commercial space will also be included. The owner is D. W. S. Holdings Ltd., 8320 St. Laurent Blvd., Montreal, and general contractor and project manager is Louis Donolo Inc. of the same address. The architects are Webb, Zerafa, Menkes & Houden, 2050 Manfield, Montreal. The Consulting Engineers (structural) are W. Z. M. H. Quinn Ltd., 95 St. Clair Ave. W.., Toronto; and the Consulting Engineers (mechanical & electrical) are Rybka, Smith & Ginsler Ltd., 209 Davenport Rd., Toronto. U.S. firms desiring additional information or wishing to express interest in this project can communicate ith Marc Donolo, c/o Louis Donolo Inc., 8320 St. Laurent Blvd., Montreal P. Q. Tel (514-387-2535).

AUSTRIA—A multi-million dollar contract for movable walls will be made in the near future in connection with the 10 billion schilling **Vienna U.N. City project.** The actual installation work will have to be performed by an Austrian Company. American manufacturers of this type of product may wish to provide AWI or IAKW (Ing. Hauptmann). with descriptive material and prices, both at the following address: A-1223 Wien, Wagramerstrasse 23, Austria. The total contract volume is estimated at 30-60 schillings. A substantial amount of contracts will be placed directly by the international organization, UNIDO and IAEA. Since IAKW and the international organizations have not yet determined who is to provide what, no exact information is available at present on the prospective sequence, volume or type of products to be ordered by the organizations themselves. There are, however, certain items such as officer furniture, simultaneous translation systems, inter-office communications systems, restaurant and catering facilities, store fixtures and refrigerators which may be ordered by the organizations. Under the present arrangement, which may also be continued, the General Services Unit of IAEA is acting as central purchasing office for both organizations. Even though the two organizations are not expected to invite bids for another two years for new buildings, U.S. companies producing any of the above equipment may nevertheless find it useful to have their names on IAEA's supplier lists. Relevant correspondence and brochures should be directed to Erik Anderson, Acting Director, General Services, IAEA, A-1010 Wien, Kaerntnerring 11, Austria.

COLOMBIA—Call for bids ill be made in May for the design and construction of a **port and petroleum terminal at Tumaco,** Department of Narino, as part of the Tumaco Refinery Project. Refinery capacity will be approx. 75,000 b.p.d. plus 230,000 tons of aromatice annually. Terminal may be used for import of crude and export of rened products. Total cost of port and terminal estimated $10-$20 million. Expected bid deadline for the terminal, other maritime facilities will be 90 days after opening of tender. Relevant State Petroleum Company office is: Division De Ingieneria, Ecopetrol, Carrera 13 No. 36-24, Bogota.

MOROCCO—Office Nationale De L'Electricite (ONE), Service Approvisionnement tricite (ONE), Service Approvisionnement, 65 Rue Aspirant Lefuente, Casablanca, invites bids for a turn-key construction, equipping, and putting into operation of a **new thermal-electric plant** at Kenitra. The initial contract will be for installation of two 60 MW units with likely option to install additional two 60 MW. units subsequently. Cost of plant with first two units only is DH 165 million (approx. $36 million). Tender No. 12600 can be ordered from ONE for DH 1000 (approx. $218). Correspondence preferably in French. Bid dealine is noon, June 29.

YUGOSLAVIA—A unified hydrosystem **throughout the Republic of Serbia,** a 20-year Morova River Basin Project (1966-85), is presently in the planning and technical feasibility phase. The first major construction phase (Phase III, 1975-79) provides for seven dams and accumulation reservoirs, and three water works. These projects will be designed and constructed so as to allow for extensive irrigation, water quality control and navigation. The Morava River Enterprise, established to manage the project, is seeking at least $50 million from the World Bank. It is expected that technical plans and financing wil be competed about July 1. Invitations to bid should be issued at that time. Isidor Colovic, General Director of the Morava River Enterprise, says that he is very interested in the participation of U.S. equipment and technology. Although invitations to bid have not yet been published, it may be useful for interested U.S. firms to contact Morava in advance. Inquiries should be addressed to: Ing. Isidor Colovia, General Director MORAVIA, Zdruz Opste Vodoprivredno Preduzece, Kneza Milosa 9, 11000 Beograd Yugoslavia.

HONG KONG—Patrick Samisky, Assistant to Director of Manufacturing, Dow Chemical Pacific Ltd., has announced that Dow will begin construction of a **polysterene plant** to produce 400 tons daily. The plant will be built on Tsing Yi Island and will be completed by late 1975. Dow will do its own design and engineering. The project manager will be appointed within the very near future and interested construction and equipment suppliers should contact: Project Manager, Dow Chemical, 3636 Richmond Ave., Houston, Tex. 77027.

KOREA—The Ministry of Education is seeking **catalogs and brochures on engineering and scientific equipment for technical and vocational schools,** to be used to develop specifications. The project will be financed by a $43 million World Bank loan. The funds will be used to purchase equipment for technical and agricultural high schools and for college level agricultural, fishery and merchant marine classes. Interested U.S. firms should forward their literature directly to: Kong You-Chan, Assistant Director, Korea/ World Bank Education Project, Ministry of Education, 26 Samchong-dong, Chongro-ku, Seoul, 110.

FRANCE—**A major urban development,** "Diplodocus," is under construction in Lille. The project includes a large commercial center, public and private offices, a hotel, and parking facilities. Diplodocus will be located in the center of Lille, close to the airport, the railway station and the major highway. Foundation work has started and completion is expected during the last quarter of 1976. U.S. businessmen interested in obtaining more details can contact: J. R. Menu, Commercial Manager, Societe Batissor, Ensemble Immobilier Diplodocus, 21 Ave. Foch, 59005 Lille, (Tel. 57-54-84).

CANADA—Plans for the construction of **a major postal plant** (MAPP) to service the Montreal area have been announced by the Canadian Post Office Department and the Ministry of Public Works. The project is now estimated at C$150 million, and will consist of one building measuring some 3,225,000 sq. ft. located near Dorval Airport. It will be the major processing point for letters, parcels and bulk mail for the metropolitan area and will make use of the most advanced equipment available. T. Pringle and Sons, 245 Victoria Ave., Montreal, have been named architects for the project, and the consulting engineers will be T. Pringle and Sons together with Asselin, Benoit, Boucher, Ducharme, and Lapointe, 4200 Dorchester Blvd. West, Montreal. The project management contract has been awarded to Shawinigan-Dyname and that firm's representative is Mr. Van Wolson, 1140 de Maisonneuve Blvd. West, Montreal. Montreal Project Manager for the Post Office Department is Bernard Gravel and the Manager for the Ministry of Public Works is Mr. St. George Pouliot. Both are located at 1140 de Maisonneuve Blvd. West, Montreal and may be reached at 514-283-3075. American suppliers of post office equipment wishing to register their interest in this project should communicate directly with R. M. Boyd, Director for Facilities and Equipment, Post Office Dept., Ottawa, Ontario K1A 0B1.

HONDURAS—The American Embassy in Tegucigalpa has submitted a report on Inter-American Development Bank loans which are in effect or under consideration to help finance **construction projects** in Honduras. These projects should offer chances for sales of U.S. goods and services. Interested U.S. firms can obtain this report from the U.S. Department of Commerce, Trade Opportunities Program, Room 1322, Washington, D.C. 20230.

JAMAICA—Minister of Industry, Commerce and Tourism P. J. Patterson, 5 South Race Course, Kingston, has announced that preparatory work is now underway to establish another **cement plant** in Jamaica. The new plant should start production by 1977-78. The Minister stated that the Government believes the project is feasible due to growing demand and the abundance of the necessary raw materials. No details on cost and location of the plant have been announced, but it is more than likely that it will be located in the western end of Jamaica, possibly in Montego Bay.

AUSTRIA—The Austrian Post & Telegraph Administration, Vienna, plans to build a **ground station for space communications** to go into service in 1978. A construction period of about three years is envisaged. The total cost of the project is currently estimated at $5.15 to $10.3 million, to be financed from the Austrian federal budget. It is understood that a site selection study conducted by contract basis by Siemens is about to be completed and that the invitation for bids may be issued in the first half of 1974. A ground station similar in size to that currently built by Switzerland is being contemplated. AP&TA will first issue a preliminary public tender, which will be published in the "Amtlicher Lieferungsanzeiger," a weekly listing of public tenders. The actual contract award will presumably be made at the beginning of 1975. The chances for U.S. companies are seen as suppliers of the antenna and associated receiving and transmitting equipment.

KUWAIT—Talal Abu Ghazaleh is a local businessman representing private Kuwaitis who are interested in investing in local industrial projects and would like to discuss **turnkey proposals** with U.S. firms. Kuwaitis can offer all capital required plus cheap energy. U.S. firms have the opportunity to sell management and perhaps marketing services as well as equipment. Kuwaitis are thinking about nine or ten industrial projects involving a total investment of approx. KD 100 million (KD 1 = $3.38). Among the projects are: textiles; plastic cups; sanitary ware; paper products; wood products; Fiberglas; carpeting; plasticizer electric pumps; aluminum, and large scale poultry raising and packaging. Mr. Ghazaleh would like Americans to visit Kuwait to discuss proposals, but he or members of his staff are prepared to go to the United States to meet potential business associates. Interested firms should address inquiries to: Richard W. Bogosian, Chief, Economic Commercial Sect., American Embassy, P.O. Box 77, Kuwait or to: Talal Abu Ghazaleh, Talal Abu Ghazaleh and Co., P.O. Box (SAFAT) 4628, Kuwait.

JAMAICA — Construction under phase two of the World Bank loan for education is due to begin in July. First tenders are to be invited by March for the construction of a **teacher training college** near Montego Bay; a new **multilateral secondary school** to be known as William Knibb High School at Falmouth in Trelawny and the **expansion of Rusea's High School** at Lucea in Hanover. The project has been divided into two phases. The schools under the first phase are now in the design stages. Tenders for construction in the second phase are to be invited by June. Equipment and furniture lists will be prepared, and interested suppliers are invited to submit catalogs **now.** It is anticipated that bids for supplying equipment and furniture will be invited by August, for delivery by May 1975. Some J$21 million is to be spent on the project. Under the project are the expansion of several existing junior secondary and high schools; construction of new ones; construction of two trade training centers; a new technical high school in Kingston and two teacher training colleges. U.S. suppliers of structural steel, the most up-to-date science, technical and vocational teaching equipment, and educational broadcasting materials and aids are invited to send catalogs to: The Project Manager, Jamaica/World Bank Project II, Ministry of Education, 5 South National Heroes Circle, Kingston 4.

CHILE — Petroquimica Chilena S.A., a government-owned firm, is studying the feasibility of constructing a **plastic resins transformer complex.** The imported goods and services for the project are estimated at $1.3 million, for which the firm hopes to obtain a loan. Construction is scheduled to start in the second half of 1975, and end in the first half of 1977. The plant will have a designed capacity of 550,000 sq. meters of vinyl flooring, 1,500 tons of hose and 2,500,000 heavy polyethlene bags annually. The plant will be located in Tocopilla. The company plans to request bids for imported equipment and technology when final studies are completed. Interested firms should contact: Petroquimica Chilena S.A., Teatinos 20, Of. 43, Casilla 284-V, Santiago.

CHILE — Petroquimica Chilena S.A., a government-owned company, has approved construction of a **plant to manufacture fishing nets.** The project is estimated to cost $5 million, with approx. $2.7 million for foreign costs, for which the firm hopes to obtain a loan. The plant will process locally produced nylon 6 into cables and fishing nets with designed capacity of 1000 m.t. of cable and 850 m.t. of knitted nets per year. Soil conditions are being tested to determine the appropriate location. Construction is scheduled to start in July and be finished in February 1976. Interested U.S. firms should contact: Petroquimica Chilena S.A., Teatinos 20, Of. 43, Casilla 284-V, Santiago.

JAMAICA — Syndicated Developments Ltd. has started construction on **25 town houses and a small apartment building** in Kingston. The town house development, known as Parkland Town Houses, will comprise 17 three-bedroom and eight two-bedroom units. The project will have a communal swimming pool and total cost will be $800,000. Developers: Syndicated Developments Ltd., 84 Knutsford Blvd., Kingston 5. Tel.: 926-6663. Arch: Marvin Goodman & Assoc., 5½ Waterloo Rd., Kingston 10. Tel.: 926-8808. Contractors: Muir & Arscott Construction Ltd., 14 Ballater Ave., Kingston 10. Tel.: 936-3355.

Northern Realty Co. has announced the construction of the **first phase, numbering 588 houses, of a 1,500 unit development** to be built near Spanish Town, about 15 miles west of Kingston. The project will be known as Friendship Mews. Developers: Northern Realty Co., 77 Old Hope Rd., Kingston 5. Tel.: 937-9018. Architects: Shearer & Morrison, 1975 Mountain View Ave., Kingston 6. Tel.: 937-9578. Contractors: Muir & Arscott Construction Ltd., address above. The contractor invites U.S. suppliers to provide brochures anl price lists on bathroom and plumbing fixtures (1,000 bathtubs, each 4½ ft. long; toilet bowls & wash basins, 3,000 of ea.; stainless steel kitchen sinks).

CHILE — Petroquimica Chilena S.A., government-owned firm, has been given approval to construct a **chlorate solvent plant.** Foreign equipment and technical services are estimated at 52 million, for which the firm hopes to obtain a loan. The plant will have a designed capacity of 10,000 m.t. per year and will have 40/60 or 60/40 perchloroethylene/carbon tetrachloride versatility. At full capacity the plant will consume locally-produced chloride at approx. 17,000 m.t. per year, and 1,500 m.t. per year locally-produced propylene. The plant will be located in Tallcahuano, Concepcion. Construction is scheduled to start during the second half of 1975, and end in second half of 1977. The feasibility studies are completed. The firm will request bids for the imported technology and equipment needs. Interested firms should contact: Petroquimica Chilena S.A., Teatinos 20, Of. 43, Casilla 284-V, Santiago, Tel. 718091.

CHILE — Petroquimica Chilena S.A., a government-owned firm, has been given approval to construct a **fluorochloromethane plant** to produce fluorodichloromethane (Freon-12), fluorotrichloromethane (Freon-11), to be used in refrigeration and aerosols. The imported goods and services for the project are estimated at $2.6 million, for which the firm hopes to obtain a loan. The plant has a designed capacity of 4,500 m.t. per year, 80 percent fluorodichloromethane and 20 percent fluorotrichloromethane. The plant will be located in Talcahuano, Concepcion. Construction is scheduled to start the second half of 1975 and end in the second half of 1977. The feasibility studies are completed. The company has requested bids for acquisition of machinery, technical assistance and installation. Interested firms should contact: Petroquimica Chilena S.A., Teatinos 20, Of. 43, Casilla 284-V, Santiago, Tel. 718091.

Summary of Future Construction Projects Available

A quarterly summary of future construction projects abroad, contract award stories and significant foreign government tenders published in *Commerce Today* and *Commerce Business Daily* during October, November and December is available to U.S. firms from the U.S. Department of Commerce, Trade Opportunities Program, Room 1322, Washington, D.C. 20232.

A pre-addressed mailing label should be included with the request to facilitate processing and mailing. The summary, which may also be reviewed at any of the 43 Commerce District Offices, alphabetically lists project summaries by country in five distinct classes: airport, seaport, railroad and highway projects; hydro and thermal electric plant and irrigation projects; hospital, hotel and housing projects; industrial plant projects; and comprehensive development projects. Whenever possible, names of contractors and responsible agencies are cited, as well as original publication dates.

A limited number of copies of the third quarter 1973 summary are also available upon request and will be distributed on a first-come, first serve basis.

CHILE — Sociedad de Ingenieros Ltda., a Chilean engineering firm, has announced that a feasibility study is underway for construction of a **sulphuric acid plant** with an estimated capacity of 1,000 tons per day at 98 percent purity. Sources of gas generation that should be considered are: flash smelting furnace, 1,200 tons/day capacity which will give out 56,000 normal cubic meters of gas per hour, containing 10 percent sulfur dioxide at 350 degrees centrigrade. Three Pierce-Smith type converters already installed in Ventanas, Valparaiso. First one, 13′ x 30′ will start operating in March. The project requires the following regulations for conversion gases: gas capturing hoods for converters, which should include a regulating system to control gas dissolution and obtain more sulphur dioxide; general project should include an interchange thermic unit to insure an adequate temperature; general project should include an electrostatic precipitator to recover dust contained in the conversion gases and to maintain high purity level of sulphuric acid. Write: Jose Miguel Perez G., Gerente General, SIGLA, Sociedad de Ingenieros Ltda., Adriana Cousino 360 - Casilla 58602, Santiago. Tel. 95071-91618. Cable: SIGLA.

DOMINICAN REPUBLIC — Feasibility studies have been completed by Hanson-Rodriguez, S.A. (U.S.-Dominican) for **four dams to be built in the Cibao Valley:** *Hatillo Dam*—On the Yuna River; of earth; 40 meters high; reservoir water volume capacity of 750 million cubic meters. For irrigation, water supply and electricity generation. Estimated cost $30 million; *Ricon Dam*—On the Jima River; concrete, 50 meters high; reservoir water volume capacity of 75 million meters. For irrigation, water supply and electricity generation. Estimated cost $10 million. *Alto Yuna Dam*—On the Yuna River; concrete; 92 meters high; reservoir water volume capacity of 110 million cubic meters. For irrigation and electricity generation. Approximate cost $40 million. *Rayacanes Dam*—On the Damu River; of earch; 44 meters high; reservoir water volume capacity of 25 million cubic meters. For water supply and electricity generation. Approximate cost $23 million. The Hatillo and Rincon Dams are scheduled for construction first, perhaps in early 1974. Inquiries should be addressed to: Ing. Michel Lulo Gitte Director General, Instituto Nacional de Recursos Hidraulicos (INDHRI), Centro de los Heroes, Santo Domingo.

IRELAND — Nitrigin Eireann Teoranta (NET), 60 Northumberland Rd. 4, Dublin, the state-sponsored fertilizer company, announced plans for the building of a £20 million ($48 million) **chemical plant to process ammonia from natural gas or naptha** on a 55-acre site at Cork harbor. The plant will start production in 1977 and employ 350 people. It will be capable of producing 1 000 tons of ammonia per day. It is designed to use naptha as a raw material, but the company is prepared to spend an additional £1 million ($2.4 million) for conversion to natural gas should predictions materialize and gas is available for industry. Contracts for the plant will be placed in 1974. It is estimated that 1,000 men will be employed on construction work.

ST. LUCIA, WEST INDIES—National Development Corp. invites submission of pre-qualification data from interested consulting engineers for the development of the **industrial estate at Vieux-Fort.** Scope of engineering work includes surveys. design drawings, specifications contract documents for construction tender, supervision, inspection of construction and issuance of payment certificates. The project calls for construction of about ¾ mile of road, provision of water supply, sanitary and storm drainage, and erection of three prefabricated steel structures to be used as factory shells. Total cost including engineering fees expected to be $F26,500. Financing by the National Development Corp.. and the Caribbean Development Bank. Prequalification information should stress similar types of work performed and location. Applicant's first-hand knowledge of site and working conditions in the region will be important. Consulting engineering firms, whether acting singly or in joint ventures. should each submit executed copy of prequalification form which may be obtained from the Office of National Development Corp., Brazil St., Castries, St. Lucia, W.I., or from Caribbean Development Bank, Treasury Building. Bridgetown, Barbados. W.I. Prequalification information must be received not later than Feb. 25 in the Office of National Development Corp. with a copy to Caribbean Development Bank.

FRANCE — Compagnie Francaise Du Tunnel Sous La Manche has announced the names of the contractors selected to participate in **Phase II of the Channel Tunnel Project** in France. Work will be led by L'Enterprise Industrielle, and other French participants include: Leon Ballot, Capaccetra, Quillery-Saint-Maur, Truchetet & Tansini. A German company, Heidkamp UND Trapp, is also a subcontractor. The only U.S. company selected was Robbins Machinery (Joy Mfg. Co.) which will supply boring equipment. The contracts for Phase III, which includes most of the major work, are expected to be signed in April 1975. A new bid request will be submitted for this Phase. Although Phase III should be of more interest to American suppliers because of its greater size, U.S. companies wishing to deal with the prime contractor of Phase II (preliminary work) should contact: Mr. Dufour, L'Entreprise Industrielle, 29 Rue de Rome, 75008 Paris, Tel: 387-5090. Despite selection of Phase II contractor. overall supervision of the Project for the French Government continues to be vested in Compagnie Francaise Du Tunnel Sous La Manche, 193 Rue de Bercy, 75012 Paris.

JAMAICA — Forest Gardens Ltd. has announced the construction of **42 three-bedroom semi-detached units** in one of Kingston's suburbs. An additional 19 units are to be built as the second phase in the development of a nine-acre site. Construction is to begin in January and is expected to take one year. U.S. suppliers of bathroom and kitchen fixtures should direct quotations to Kenneth Carby, 23 Lady Musgrave Rd., Kingston 5. Developers: Forest Gardens Ltd., 23 Lady Musgrave Rd., Kingston 5, Tel: 937-7045. Architects: Kenneth Carby & L.T. Warmington, 149 King St., Kingston, Tel: 929-1586. Contractors to be assigned.

Visiting Buyers And Officials

REPUBLIC OF CHINA (TAIWAN)—CETDC Petrochemical Procurement Mission members Sheling Wang, General Manager, New Hwana Corp., Li King, Deputy General Manager, Tung Tai Paper Corp., Charles C. R. Lao, China Gulf Plastics, Albert S. Huang, Pan Asia Plastins Industry Corp., William W. K. Ho, Robertson Enterprises and Kim T. Yu, Tim and Yu Corp., arrive Seattle Feb. 3, Chicago Feb. 27, New York March 9, Pittsburgh March 17, Houston March 20, Los Angeles March 26-28. Mission interested in meeting U.S. suppliers/manufacturers to discuss long-term cooperation whether or not there is prospect for immediate delivery or contract for vinyl choride monomer (VCN) ASTM Standards, PVC paste resin GEON 121 or equivalent, dioctyl phthalate (DOP) ASTM standards, butyl benzyl phthalate (BBP) santicizer 160 or equivalent. polypropylene resin extrusion type MI 2-5, polyethylene low density 0.010-0.925 MI 1-60, polystyrene high impact grade, paper pulp, waste paper, stabilizer for PVC processing, dimethyl terephthalate (DMT) for making polyester fiber, caprolactam and acrylonitrile monomer for making acrylic fiber, rayon pulp for rayon fiber, TPA for making polester fiber, pigment for PVC processing, zinc dust for zinc salts 200 M/T, wood rosin for paper sizing 200 M/T, gum arabic for paper making 50 M/T, butyl acetate (solvent) 500 M/T and ethyl acetate (solvent) 500 M/T.

U.S. firms may express interest in meeting Mission members by notifying United States Exposition Staff, Room 4845, Main Commerce Building, Washington, D.C. 20230, (202-967-5471).

New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to Room 6880, U.S. Department of Commerce, Washington, D.C. 20230, or to any of its district offices.

OFFICE OF THE SECRETARY MARITIME ADMINISTRATION

A statistical analysis of the world's merchant fleets, showing age, size, speed and draft by frequency groupings as of Dec. 31, 1972. 64pp. $1.80. This report is a statistical analysis of the world's merchant fleet, and includes only those ships of 1,000 gross tons and over. It excludes those operating exclusively on the Great Lakes and cable ships, icebreakers, trawlers, other special types and those owned by the military forces.

DOMESTIC AND INTERNATIONAL BUSINESS ADMINISTRATION

BUREAU OF DOMESTIC COMMERCE

Construction review. Vol 19, No. 9. September 1973. 54pp. Annual subscription $11.50 (add $3 for foreign mailing). Single copy $1.

BUREAU OF EAST-WEST TRADE

Export administration bulletin—supplement to export administration regulations (formerly export control bulletin). (EAB-OEA-108). 8pp. 50¢.

BUREAU OF INTERNATIONAL COMMERCE

Overseas Business Reports

Annual subscription $28.50 (add $7.25 for foreign mailing). Single copies 30¢.

Foreign trade regulations of Hong Kong 73-61). 12pp.

Market profiles for South America (OBR 73-62). 16pp.

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Selling in Indonesia (OBR 73-64). 20pp.

Establishing a business in Pakistan (OBR 73-65). 16pp.

Foreign trade regulations of Korea (OBR 73-66). 12pp.

Foreign trade regulations of the Arab Republic of Egypt. (OBR 73-67). 8pp.

Foreign trade regulations of Turkey (73-68). 12pp.

Selling in India: Government procurement procedures (OBR 73-69). 14pp.

U.S. foreign trade by quarters: July-September 1971, July-Sept. 1973 (OBR 73-70). 30pp.

Foreign trade regulations of Japan (OBR 73-72). 10pp.

SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION

BUREAU OF ECONOMIC ANALYSIS

Defense indicators. Series ES4, No. 74-1. Annual subscription $11 (add $2.75 for foreign mailing). Single copy 95¢. Brings together the principal time series on defense activity which influence short-term changes in the national economy.

Survey of current business. Vol. 53. No. 12. December 1973. Annual subscription, including weekly statistical supplements, $34.45 (add $8.65 for foreign mailing). Single copy $2.25.

1973 business statistics. 19th biennial edition. September 1973. A supplement to the *Survey of Current Business.* 476pp. $5.15. Presents historical data for the series appearing in the S-pages of the Survey of Current Business. Data cover the years 1947 through 1972 for approximately 2,500 series.

BUREAU OF THE CENSUS

Census Portraits

Census statistics sketch portraits of the people of each State and the Nation. Four pages each; 10¢ per copy. A 25 percent discount is available on orders of 100 copies or more mailed to the same address.

Alaska (CP73-2).
Arizona (CP73-3).
Arkansas (CP73-4).
Colorado (CP73-6).
Georgia (CP73-11).
Idaho (CP73-13).
Iowa (CP73-16).
Kansas (CP73-17).
Louisiana (CP73-19).
Maine (CP73-20).

Small-area data notes. Vol. 8, No. 12. 12pp. Sold in combination with Data Access Descriptions at an annual subscription of $5.50. Single copy price varies; this issue 25¢.

Cotton ginning prior to January 1 for the crop of 1973, by counties (A20: 73-5). 8pp. 10¢.

1969 Census of Agriculture

Special Reports

Cattle, hogs, sheep, goats. Vol. V, part 9. 694pp. $8.50.

Horticultural specialties. Vol. V, part 10. 648pp. $7.95.

Poultry. Vol. V, part 7. 390pp.

Construction and Housing

Housing completions: October 1973 (C22-73-10). 8pp. Annual subscription $1. Single copy 10¢.

New one-family homes sold and for sale: October 1973 (C25-73-10). 12pp. Annual subscription $3. Single copy (monthly) 10¢. Single copy (annual) $2.

Value of new construction put in place: November 1973 (C30-73-11). 18pp. Annual subscription, including monthly and annual supplement $6.20 (add $1.55 for foreign mailing). Single copy (monthly) 55¢.

Housing starts: November 1973 (C20-73-11). 16pp. Annual subscription $5.15 (add $1.30 for foreign mailing). Single copy 45¢.

Authorized construction — Washington, D.C. area: November 1973 (C41-73-11). 4pp. Annual subscription $1. Single copy 10¢.

Distribution and Services

Current Business Reports

1972 retail trade—annual sales and purchases, year-end inventories, and accounts receivable of retail stores, by kind of business (BR-72-13). 30pp. 40¢.

Monthly department store sales in selected areas: November 1973 (BD-73-11). 12pp. Annual subscription $1. Single copy 10¢.

Monthly selected services receipts: November 1973 (BS-73-11). 12pp. Annual subscription $1. Single copy 10¢.

Monthly wholesale trade—sales and inventories: November 1973 (BW-73-11). 20pp. Annual subscription $5.15 (add $1.30 for foreign mailing). Single copy 45¢.

Canned food—stocks, pack, shipments: Nov. 1, 1973 (BR-74-1). 4pp. Annual subscription (five issues) $1. Single copy 25¢.

Monthly retail trade—sales and accounts receivable: November 1973 (BR-73-11). 34pp. 40¢.

Estimated sales of U.S. retail stores for weeks ending Jan. 19 (CB-74-25) and Jan. 26 (CB-74-28). 2pp. each. 15¢ apiece.

Advance monthly retail sales: December 1973 (CB-74-10). 2pp. 15¢.

Weekly retail sales. Estimated sales of U.S. retail stores for weeks ending Dec. 29 (CB-74-4), Jan. 5 (CB-74-11) and Jan. 12 (CB-74-19). 2pp. each. 15¢ apiece.

Foreign trade

Imports—commodity by country: October 1973 (FT 135-73-10). 240pp. Annual subscription $49.85 (add $12.50 for foreign mailing).

Export and import merchandise: November 1973 (FT 900-73-11). 6pp. Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

Gold movements: November 1973 (FT 2402-73-11). 2pp. Annual subscription $1. Single copy 10¢.

Exports—commodity by country: October 1973 (FT 410-73-10). 544pp. Annual subscription $88.85 (add $22.25 for foreign mailing). Single copy $7.45.

Waterborne exports and general imports: July 1973 (FT 985-73-7). 22pp. Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

General imports—cotton manufacturers: November 1973 (Ft 130-73-11). 12pp. Annual subscription $1. Single copy 10¢

Highlights of exports and imports: November 1973 (FT 990-73-11). January 1974. 120 pp. Annual subscription $24.45 (add $6.15 for foreign mailing). Single copy $2.05.

Governments

City government finances in 1971-72 (GF72, No. 4) 110pp. $1.30.

1972 Census of Governments

Employee retirement systems of State and local governments. Vol. 6, No. 1. 58pp. $1.25. This report is one of several publications of Volume 6, Topical Studies, of the 1972 Census of Governments. It provides findings of this census concerning membership, receipts, beneficiaries and benefit payments, and financial assets of employee-retirement systems for State and local government employees.

Industry

Cotton, manmade fiber staple, and linters—seasonal adjustment supplement: 1968 to 1972 (Series M22P, supplement). 12pp. Annual subscription $1.50. Single copy 15¢.

Woven fabrics—inventories and unfilled orders—seasonal adjustment supplement: 1968 to 1972 (Series M22A, supplement-2). 20pp. Annual subscription $1.50. Single copy 15¢.

Rubber—supply and distribution for the United States: summary for 1972 (Series: M30A(72)-13). 6pp. Annual subscription $1.50. Single copy 15¢.

Pulp, paper, and board: 1972 (Series M26A(72)-13). 22pp. 25¢.

Aluminum ingot and mill products: summary for 1972 (Series M33-2(72)-14). 22pp. Annual subscription $1.50 Single copy 15¢.

Anti-friction bearings: manufacturings' production shipments, and unfilled orders: 1972 (Series BDCF-88(72)-1. 4pp. 25¢.

1972 Census of Manufactures

Preliminary Report—Industry Series

Creamery butter, SIC 2021 (MC72(P)-20B-1). 8pp. 35¢.

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1972 Census of Manufactures

Advance Report—Area Series

General statistics for geographic divisions and States (MC72(A)-2). 8pp. 35¢.

Population

Current Population Reports

Estimates of the population of the United States, by age, sex, and race: April 1, 1970 to July 1, 1973 (advance report) (Series P-25, No. 511). 8pp. 25¢.

Persons of Spanish origin in the United States: March 1973 (advance report) (Series P-20, No. 259). 4pp. 25¢.

Household and family characteristics: March 1973 (Series P-20, No. 258). 100pp. $1.80.

1970 Census of Population

Characteristics of the Population

Indiana. Vol. 1, part 16. 1,500pp., hard covers. $11.50.

Pennsylvania. Vol. 1, part 40, sec. 2. 1,205 pp.; hard cover. $18.25 for sections 1 and 2, sold as a set only.

SCIENCE AND TECHNOLOGY

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Dimensions/NBS (formerly Technical News Bulletin). Vol. 58, No. 1. Jan. 1974. Annual subscription $6.50 (add $1.75 for foreign mailing). Single copy 65¢.

Physics and Chemistry. Vol. 77A, No. 6. Nov.-Dec. 1973. Annual subscription $17 (add $4.25 for foreign mailing). Single copy price varies; this issue $1.85.

Mathematical Sciences. Vol. 77B, Nos. 3 & 4. July-Dec. 1973. Annual subscription $9 (add $2.25 for foreign mailing). Single copy $2.25.

Laser induced damage in optical materials: 1973 (Spec. Publ. 387). 285pp. $2.65. The proceedings of these Symposia represent the major sources of information in the field of laser-induced damage in optical materials, to help manufacturers and users of laser devices, components, and systems in drawing up specifications.

Some references of Metric information—with charts on—all you need to know about metric; metric conversion factors (Spec. Publ. 389). 12pp. 25¢

Fire incidents involving sleepwear worn by children ages 6-12 (Tech. Note 810). 24pp. 50¢. This report is a revision of an unpublished document that was used as supporting evidence by the Secretary of Commerce in determining the need for a flammability standard for children's sleepwear sizes 7 through 14.

NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

Monthly weather review. Vol. 101, No. 9. September 1973. $1.75. *Important notice to authors and subscribers:* beginning with Vol. 102, No. 1, January 1974, the Monthly Weather Review will become a publication of the American Meteorological Society. The December 1973 issue will be the last available from the Superintendent of Documents. Adjustment will be made on any subscription that extends beyond that date. Further details of this transfer are included on page 718 of the September issue.

Environmental Research Laboratories

A feasibility study for the remote measurement of underwater currents using acoustic doppler techniques (ERL 278-WPL 25). 40pp. 65¢.

Computer simulation of multi-aircraft flights: an aid to mission planning (ERL 281-APCL 29). 32pp. 65¢. Describes the development of a computer program to aid in GATE mission planning.

Caribbean Atlantic geotraverse, NOAA-IDOE 1971, report no. 3, graviyt (ERL 277-AOML 11). 40pp. (30pp. are fold-iut charts), $2.30. This repirt describes the collection and reduction o fabout 30,000 km of gravity data acquired during 1971 by the NOAA ship Researcher. The data, in processed and original form, are available through the NOAA National Geophysical and Solar-Terrestrial Data Center, Boulder, Colo., under NGSDC file number 00102.

National Marine Fisheries Service

Marine fisheries review. Vol. 35, No. 12. December 1973. Annual subscription $12.50 (add $3.25 for foreign mailing). Single copy $1.25.

Marine fisheries abstracts. Vol. 26, No. 12. Annual subscription $6.50 (add $1.75 for foreign mailing). Single copy 65¢. Summaries of selected articles from trade, engineering, and scientific journals dealing with the entire spectrum of fishery science. It is designed to serve the needs of fishery scientists, engineers, and managers in industry, academic institutions, and government by supplying timely information on current progress in fishery research and technology.

National Ocean Survey

The following nautical chart catalog has been revised and is available from the Distribution Division (C44), national Ocean survey, Riverdale, Md. 20804. (301-344-2613). Free upon request.

United States Atlantic and Gulf Coasts, including Puerto Rico and the Virgin Islands (Nautical Chart Catalog 1). Folder-style catalog.

OFFICE OF TELECOMMUNICATIONS

Telephone density and telephone company area data (OT Report 73-18). 20pp. 50¢. The density of telephones per square mile and the percentage coverage of geographical areas serviced in each State by the three major companies as a whole, are presented for the contiguous United States. Useful to individuals or groups who require State-by-State statistics on the telephone industry.

Technical considerations in the efficient use of the spectrum—part 1 (OT Report 73-19). 116pp. $1.35.

An HF high-power vertically directed array for ionospheric modification (OT Report 73-21). 34pp.

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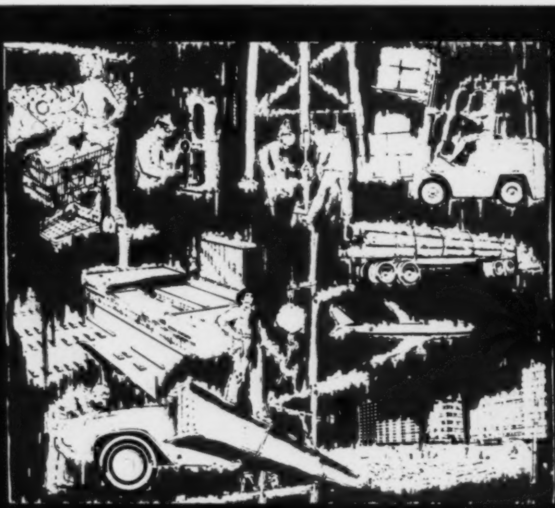

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